Statement of Basis of the Federal Operating Permit

Diamond Shamrock Refining Company, L.P.

Site/Area Name: Valero McKee Refinery
Physical location: 6701 FM 119
Nearest City: Sunray
County: Moore

Permit Number: O1555
Project Type: Significant Revision

Standard Industrial Classification (SIC) Code: 2911
SIC Name: Petroleum Refining

This Statement of Basis sets forth the legal and factual basis for the draft changes to the permit conditions resulting from the significant revision project in accordance with 30 TAC §122.201(a)(4). The applicant has submitted an application for a significant permit revision per §§ 122.219-211. This document may include the following information:

A description of the facility/area process description;
A description of the revision project;
A basis for applying permit shields;
A list of the federal regulatory applicability determinations;
A table listing the determination of applicable requirements;
A list of the New Source Review Requirements;
The rationale for periodic monitoring methods selected;
The rationale for compliance assurance methods selected;
A compliance status; and
A list of available unit attribute forms.

Prepared on: January 14, 2014

Operating Permit
Basis of Determination

Description of Revisions

The following revisions are included in the draft permit:

- Former Special Term and Condition 1.E. for RICE MACT future compliance for unit E-7 was removed. High level MACT ZZZZ applicability was added to the Applicable Requirements summary for this unit (RRT for this rule is currently under review to incorporate changes that resulted from the January 2013 rule amendment).

- Special Term and Condition 1.F. (formerly 1.G.) was updated to remove Unit ID H-2. NSPS J requirements for this unit are now included in the Applicable Requirements Summary.

- A new steam boiler (Unit ID B-22) with NSPS Db, NSPS Ja, and MACT DDDDD applicability, as well as a permit shield for Chapter 112, was added with to permit.

- Several Boilers and Heaters (Unit ID H-2, & Group IDs GRP-BOILER1, GRP-BOILER2, GRP-HTR-FG, & GRP-HTR-FG2) were updated to include MACT DDDDD applicability.

- Several new storage tanks (Unit IDs S-230, S-231, S-232, S-233, S-235, & S-236) with NSPS Kb and MACT CC applicability were added to the permit. Unit ID S-234 was added to the permit shield for NSPS Kb and MACT CC.

- Unit ID S-006 was removed from a Group ID GRP-TK1, and is now included in the Applicable Requirements Summary with updated NSPS Kb and MACT CC applicability.

- Unit ID H-2 was removed from Group ID GRP-HTR-FG2, and is now included in the Applicable Requirements Summary with NSPS J, NSPS Ja, and MACT DDDDD applicability, as well as a permit shield for Chapter 112.

- Two sulfur recovery units (Unit IDs V-16 & V-5) were updated to include NSPS Ja applicability.

- All references to PSD Permit PSDTX861M2 have been updated to PSDTX861M3.

- Standard Permits 94808, 107773, 7 107848 were incorporated into NSR Permit 9708/PSD Permit PSDTX861M3, and have been removed from the NSR Authorization References Summary.

- Appendix B has been updated to include the 12/20/13 version of the Major NSR Summary Table and NSR Permit 9708/PSD Permit PSDTX861M3.

- The Applicable Requirements Summary and Permit Shield attachments have been rearranged according to Unit Type instead of Unit/Group ID numbers.

Permit Area Process Description

The Valero McKee Refinery processes crude oil to produce typical petroleum refinery products such as blended gasoline, diesel, kerosene, jet fuels, asphalt, etc. The crude oil processed at the refinery is received from off-site via pipeline and/or transport vessels. The refinery contains the following key operations: distillation, reforming/hydrotreating units, fluidized catalytic cracking unit (FCCU), hydrocracking unit, alkylation operations, Methyl Tertiary-Butyl Ether (MTBE) and Tertiary Amyl Methyl Ether (TAME) units, treating and blending unit, intermediate and final product storage areas, wastewater treating unit, sulfur recovery units, acid plant, and a boiler house.

In almost all of the process units at the site, there are furnaces, process heaters and reboilers that support various operations. The fuels burned in these furnaces, process heaters and boilers are either natural gas or fuel gas. Emissions from these combustion units include nitrogen oxides, sulfur dioxides, carbon monoxide, particulate matter with diameter less than 10 microns, and uncombusted volatile organic compounds to the atmosphere. Fugitive piping components are also common among the various processes with the refinery. The piping fugitive components potentially emit VOC and in some cases HAPs. There are five flares currently in operation at the McKee Refinery. There is also one vapor combustor currently in operation at the McKee Refinery. The wastewater generated with the various areas of the refinery is a Group 1 wastewater system.

FOPs at Site

The "application area" consists of the emission units and that portion of the site included in the application and this permit. Multiple FOPs may be issued to a site in accordance with 30 TAC § 122.201(e). When there is only one area for the site, then the application information and permit will include all units at the site. Additional FOPs that exist at the site, if any, are listed below.

Additional FOPs: O3391, O3427

Major Source Pollutants

The table below specifies the pollutants for which the site is a major source:

Major Pollutants	VOC, SO_2, PM, NO_X, HAPS, CO, NH_3

Reading State of Texas's Federal Operating Permit

The Title V Federal Operating Permit (FOP) lists all state and federal air emission regulations and New Source Review (NSR) authorizations (collectively known as "applicable requirements") that apply at a particular site or permit area (in the event a site has multiple FOPs). **The FOP does not authorize new emissions or new construction activities.** The FOP begins with an introductory page which is common to all Title V permits. This page gives the details of the company, states the authority of the issuing agency, requires the company to operate in accordance with this permit and 30 Texas Administrative Code (TAC) Chapter 122, requires adherence with NSR requirements of 30 TAC Chapter 116, and finally indicates the permit number and the issuance date.

This is followed by the table of contents, which is generally composed of the following elements. Not all permits will have all of the elements.

- General Terms and Conditions
- Special Terms and Conditions
    - Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting
    - Additional Monitoring Requirements
    - New Source Review Authorization Requirements
    - Compliance Requirements
    - Protection of Stratosphere Ozone
    - Permit Location
    - Permit Shield (30 TAC § 122.148)
- Attachments
    - Applicable Requirements Summary
        - Unit Summary
        - Applicable Requirements Summary
    - Additional Monitoring Requirements
    - Permit Shield
    - New Source Review Authorization References
    - Compliance Plan
    - Alternative Requirements
- Appendix A
    - Acronym list
- Appendix B
    - Copies of major NSR authorizations

General Terms and Conditions

The General Terms and Conditions are the same and appear in all permits. The first paragraph lists the specific citations for 30 TAC Chapter 122 requirements that apply to all Title V permit holders. The second paragraph describes the requirements for record retention. The third paragraph provides details for voiding the permit, if applicable. The fourth paragraph states that the permit holder shall comply with the requirements of 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit. The fifth paragraph provides details on submission of reports required by the permit.

Special Terms and Conditions

Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting. The TCEQ has designated certain applicable requirements as site-wide requirements. A site-wide requirement is a requirement that applies uniformly to all the units or activities at the site. Units with only site-wide requirements are addressed on Form OP-REQ1 and are not required to be listed separately on a OP-UA Form or Form OP-SUM. Form OP-SUM must list all units addressed in the application and provide identifying information, applicable OP-UA Forms, and preconstruction authorizations. The various OP-UA Forms provide the characteristics of each unit from which applicable requirements are established. Some exceptions exist as a few units may have both site-wide requirements and unit specific requirements.

Other conditions. The other entries under special terms and conditions are in general terms referring to compliance with the more detailed data listed in the attachments.

Attachments

Applicable Requirements Summary. The first attachment, the Applicable Requirements Summary, has two tables, addressing unit specific requirements. The first table, the Unit Summary, includes a list of units with applicable requirements, the unit type, the applicable regulation, and the requirement driver. The intent of the requirement driver is to inform the reader that a given unit may have several different operating scenarios and the differences between those operating scenarios.

The applicable requirements summary table provides the detailed citations of the rules that apply to the various units. For each unit and operating scenario, there is an added modifier called the "index number," detailed citations specifying monitoring and testing requirements, recordkeeping requirements, and reporting requirements. The data for this table are based on data supplied by the applicant on the OP-SUM and various OP-UA forms.

Additional Monitoring Requirement. The next attachment includes additional monitoring the applicant must perform to ensure compliance with the applicable standard. Compliance assurance monitoring (CAM) is often required to provide a reasonable assurance of compliance with applicable emission limitations/standards for large emission units that use control devices to achieve compliance with applicant requirements. When necessary, periodic monitoring (PM) requirements are specified for certain parameters (i.e. feed rates, flow rates, temperature, fuel type and consumption, etc.) to determine if a term and condition or emission unit is operating within specified limits to control emissions. These additional monitoring approaches may be required for two reasons. First, the applicable rules do not adequately specify monitoring requirements (exception- Maximum Achievable Control Technology Standards (MACTs) generally have sufficient monitoring), and second, monitoring may be required to fill gaps in the monitoring requirements of certain applicable requirements. In situations where the NSR permit is the applicable requirement requiring extra monitoring for a specific emission unit, the preferred solution is to have the monitoring requirements in the NSR permit updated so that all NSR requirements are consolidated in the NSR permit.

Permit Shield. A permit may or may not have a permit shield, depending on whether an applicant has applied for, and justified the granting of, a permit shield. A permit shield is a special condition included in the permit document stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirement(s) or specified applicable state-only requirement(s).

New Source Review Authorization References. All activities which are related to emissions in the state of Texas must have a NSR authorization prior to beginning construction. This section lists all units in the permit and the NSR authorization that allowed the unit to be constructed or modified. Units that do not have unit specific applicable requirements other than the NSR authorization do not need to be listed in this attachment. While NSR permits are not physically a part of the Title V permit, they are legally incorporated into the Title V permit by reference. Those NSR permits whose emissions exceed certain PSD/NA thresholds must also undergo a Federal review of federally regulated pollutants in addition to review for state regulated pollutants.

Compliance Plan. A permit may have a compliance schedule attachment for listing corrective actions plans for any emission unit that is out of compliance with an applicable requirement.

Alternative Requirements. This attachment will list any alternative monitoring plans or alternative means of compliance for applicable requirements that have been approved by the EPA Administrator and/or the TCEQ Executive Director.

Appendix A

Acronym list. This attachment lists the common acronyms used when discussing the FOPs.

Appendix B

Copies of major NSR authorizations applicable to the units covered by this permit have been included in this Appendix, to ensure that all interested persons can access those authorizations.

Stationary Vents subject to 30 TAC Chapter 111 not addressed in the Special Terms and Conditions

All stationary vents subject to 30 TAC Chapter 111 not covered in the Special Terms and Conditions are listed in the permit's Applicable Requirement Summary. The basis for the applicability determinations for these vents are listed in the Determination of Applicable Requirements table.

Federal Regulatory Applicability Determinations

The following chart summarizes the applicability of the principal air pollution regulatory programs to the permit area:

Regulatory Program	Applicability (Yes/No)
Prevention of Significant Deterioration (PSD)	Yes
Nonattainment New Source Review (NNSR)	No
Minor NSR	Yes
40 CFR Part 60 - New Source Performance Standards	Yes
40 CFR Part 61 - National Emission Standards for Hazardous Air Pollutants (NESHAPs)	Yes
40 CFR Part 63 - NESHAPs for Source Categories	Yes
Title IV (Acid Rain) of the Clean Air Act (CAA)	No
Title V (Federal Operating Permits) of the CAA	Yes
Title VI (Stratospheric Ozone Protection) of the CAA	Yes
CAIR (Clean Air Interstate Rule)	No

Basis for Applying Permit Shields

An operating permit applicant has the opportunity to specifically request a permit shield to document that specific applicable requirements do not apply to emission units in the permit. A permit shield is a special condition stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements. A permit shield has been requested in the application for specific emission units. For the permit shield requests that have been approved, the basis of determination for regulations that the owner/operator need not comply with are located in the "Permit Shield" attachment of the permit.

Insignificant Activities

In general, units not meeting the criteria for inclusion on either Form OP-SUM or Form OP-REQ1 are not required to be addressed in the operating permit application. Examples of these types of units include, but are not limited to, the following:

1. Office activities such as photocopying, blueprint copying, and photographic processes.
2. Sanitary sewage collection and treatment facilities other than those used to incinerate wastewater treatment plant sludge. Stacks or vents for sanitary sewer plumbing traps are also included.
3. Food preparation facilities including, but not limited to, restaurants and cafeterias used for preparing food or beverages primarily for consumption on the premises.
4. Outdoor barbecue pits, campfires, and fireplaces.
5. Laundry dryers, extractors, and tumblers processing bedding, clothing, or other fabric items generated primarily at the premises. This does not include emissions from dry cleaning systems using perchloroethylene or petroleum solvents.
6. Facilities storing only dry, sweet natural gas, including natural gas pressure regulator vents.
7. Any air separation or other industrial gas production, storage, or packaging facility. Industrial gases, for purposes of this list, include only oxygen, nitrogen, helium, neon, argon, krypton, and xenon.
8. Storage and handling of sealed portable containers, cylinders, or sealed drums.
9. Vehicle exhaust from maintenance or repair shops.
10. Storage and use of non-VOC products or equipment for maintaining motor vehicles operated at the site (including but not limited to, antifreeze and fuel additives).
11. Air contaminant detectors and recorders, combustion controllers and shut-off devices, product analyzers, laboratory analyzers, continuous emissions monitors, other analyzers and monitors, and emissions associated with sampling activities. Exception to this category includes sampling activities that are deemed fugitive emissions and under a regulatory leak detection and repair program.
12. Bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analysis, including but not limited to, assorted vacuum producing devices and laboratory fume hoods.
13. Steam vents, steam leaks, and steam safety relief valves, provided the steam (or boiler feedwater) has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
14. Storage of water that has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
15. Well cellars.
16. Fire or emergency response equipment and training, including but not limited to, use of fire control equipment including equipment testing and training, and open burning of materials or fuels associated with firefighting training.
17. Crucible or pot furnaces with a brim full capacity of less than 450 cubic inches of any molten metal.
18. Equipment used exclusively for the melting or application of wax.
19. All closed tumblers used for the cleaning or deburring of metal products without abrasive blasting, and all open tumblers with a batch capacity of 1,000 lbs. or less.
20. Shell core and shell mold manufacturing machines.
21. Sand or investment molds with a capacity of 100 lbs. or less used for the casting of metals;
22. Equipment used for inspection of metal products.
23. Equipment used exclusively for rolling, forging, pressing, drawing, spinning, or extruding either hot or cold metals by some mechanical means.
24. Instrument systems utilizing air, natural gas, nitrogen, oxygen, carbon dioxide, helium, neon, argon, krypton, and xenon.
25. Battery recharging areas.
26. Brazing, soldering, or welding equipment.

Determination of Applicable Requirements

The tables below include the applicability determinations for the emission units, the index number(s) where applicable, and all relevant unit attribute information used to form the basis of the applicability determination. The unit attribute information is a description of the physical properties of an emission unit which is used to determine the requirements to which the permit holder must comply. For more information about the descriptions of the unit attributes specific Unit Attribute Forms may be viewed at www.tceq.texas.gov/permitting/air/nav/air_all_ua_forms.html.

A list of unit attribute forms is included at the end of this document. Some examples of unit attributes include construction date; product stored in a tank; boiler fuel type; etc.. Generally, multiple attributes are needed to determine the requirements for a given emission unit and index number. The table below lists these attributes in the column entitled "Basis of Determination." Attributes that demonstrate that an applicable requirement applies will be the factual basis for the specific citations in an applicable requirement that apply to a unit for that index number. The TCEQ Air Permits Division has developed flowcharts for determining applicability of state and federal regulations based on the unit attribute information in a Decision Support System (DSS). These flowcharts can be accessed via the internet at www.tceq.texas.gov/permitting/air/nav/air_supportsys.html. The Air Permits Division staff may also be contacted for assistance at (512) 239-1250.

The attributes for each unit and corresponding index number provide the basis for determining the specific legal citations in an applicable requirement that apply, including emission limitations or standards, monitoring, recordkeeping, and reporting. The rules were found to apply or not apply by using the unit attributes as answers to decision questions found in the flowcharts of the DSS. Some additional attributes indicate which legal citations of a rule apply. The legal citations that apply to each emission unit may be found in the Applicable Requirements Summary table of the draft permit. There may be some entries or rows of units and rules not found in the permit, or if the permit contains a permit shield, repeated in the permit shield area. These are sets of attributes that describe negative applicability, or; in other words, the reason why a potentially applicable requirement does not apply.

If applicability determinations have been made which differ from the available flowcharts, an explanation of the decisions involved in the applicability determination is specified in the column "Changes and Exceptions to RRT." If there were no exceptions to the DSS, then this column has been removed.

The draft permit includes all emission limitations or standards, monitoring, recordkeeping and reporting required by each applicable requirement. If an applicable requirement does not require monitoring, recordkeeping, or reporting, the word "None" will appear in the Applicable Requirements Summary table. If additional periodic monitoring is required for an applicable requirement, it will be explained in detail in the portion of this document entitled "Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected."

When attributes demonstrate that a unit is not subject to an applicable requirement, the applicant may request a permit shield for those items. The portion of this document entitled "Basis for Applying Permit Shields" specifies which units, if any, have a permit shield.

Operational Flexibility
When an emission unit has multiple operating scenarios, it will have a different index number associated with each operating condition. This means that units are permitted to operate under multiple operating conditions. The applicable requirements for each operating condition are determined by a unique set of unit attributes. For example, a tank may store two different products at different points in time. The tank may, therefore, need to comply with two distinct sets of requirements, depending on the product that is stored. Both sets of requirements are included in the permit, so that the permit holder may store either product in the tank.

Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*
E-7	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-01	Brake HP = Stationary RICE with a brake hp greater than or equal to 100 and less than 250 hp. Crankcase = The stationary CI RICE is not equipped with a closed crankcase ventilation system. Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002. Performance Test = A performance test has been previously conducted that meets the conditions in 40 CFR § 63.6610(d)(1)-(5). Control Technique = Oxidation catalyst Different Schedule = Schedule specified in Subpart ZZZZ for submission of reports applies. Emission Limitation = Reducing carbon monoxide emissions from the stationary RICE Service Type = Normal use. Monitoring System = Monitoring system other than a CPMS or CEMS Stationary RICE Type = 2 stroke spark ignited lean burn engine
FWPMP-1	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-02	Brake HP = Stationary RICE with a brake hp greater than or equal to 300 hp and less than or equal to 500 hp. Manufacture Date = The stationary RICE was manufactured prior to January 1, 2008. Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002. Different Schedule = Schedule specified in Subpart ZZZZ for submission of reports applies. Service Type = Emergency use. Stationary RICE Type = Compression ignition engine
FWPMP-2	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-02	Brake HP = Stationary RICE with a brake hp greater than or equal to 300 hp and less than or equal to 500 hp. Manufacture Date = The stationary RICE was manufactured prior to January 1, 2008. Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002. Different Schedule = Schedule specified in Subpart ZZZZ for submission of reports applies. Service Type = Emergency use. Stationary RICE Type = Compression ignition engine
FWPMP-3	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-02	Brake HP = Stationary RICE with a brake hp greater than or equal to 300 hp and less than or equal to 500 hp. Manufacture Date = The stationary RICE was manufactured prior to January 1, 2008. Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002. Different Schedule = Schedule specified in Subpart ZZZZ for submission of reports applies. Service Type = Emergency use. Stationary RICE Type = Compression ignition engine

Unit ID	Regulation	Index Number	Basis of Determination*
FWPMP-4	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-02	Brake HP = Stationary RICE with a brake hp greater than or equal to 300 hp and less than or equal to 500 hp. Manufacture Date = The stationary RICE was manufactured prior to January 1, 2008. Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002. Different Schedule = Schedule specified in Subpart ZZZZ for submission of reports applies. Service Type = Emergency use. Stationary RICE Type = Compression ignition engine
OLYMP-BLRHS	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-03	Brake HP = Stationary RICE with a brake hp less than 100 hp. Manufacture Date = The stationary RICE was manufactured prior to January 1, 2008. Construction/Reconstruction Date = Commenced construction or reconstruction on or after December 19, 2002, but before June 12, 2006. Different Schedule = Schedule specified in Subpart ZZZZ for submission of reports applies. Service Type = Emergency use. Stationary RICE Type = 4 stroke spark ignited lean burn engine.
OLYMP-MNOFC	40 CFR Part 60, Subpart IIII	60IIII-01	Stationary CI Engine = Unit is a stationary compression ignition engine
OLYMP-MNOFC	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-04	Brake HP = Stationary RICE with a brake hp greater than or equal to 300 hp and less than or equal to 500 hp. Manufacture Date = The stationary RICE was manufactured prior to January 1, 2008. Construction/Reconstruction Date = Commenced construction or reconstruction on or after June 12, 2006. Different Schedule = Schedule specified in Subpart ZZZZ for submission of reports applies. Service Type = Emergency use. Installation Date = The emergency use stationary RICE was installed on or after June 12, 2006. Stationary RICE Type = Compression ignition engine
SUBSTN 32	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-02	Brake HP = Stationary RICE with a brake hp greater than or equal to 300 hp and less than or equal to 500 hp. Manufacture Date = The stationary RICE was manufactured prior to January 1, 2008. Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002. Different Schedule = Schedule specified in Subpart ZZZZ for submission of reports applies. Service Type = Emergency use. Stationary RICE Type = Compression ignition engine
GRP-TK1	40 CFR Part 60, Subpart K	60K-01	Construction/Modification Date = On or before June 11, 1973

Unit ID	Regulation	Index Number	Basis of Determination*
GRP-TK1	40 CFR Part 63, Subpart CC	63CC-01	Existing Source = The storage vessel is at an existing source. Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1) - (6). Subject to 40 CFR Part 63 Subparts F, G, H or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I. True Vapor Pressure = Maximum true vapor pressure of the total organic HAPs in the liquid is less than 11.11 psi (76.6 kPa) Emission Control Type = External floating roof Existing Kb Source = The storage vessel is not part of an existing source or is not subject to the provisions of 40 CFR Part 60, Subpart Kb. Group 1 Storage Vessel = The storage vessel is a Group 1 storage vessel (as defined in 40 CFR § 63.641) Seal Type = Two seals, one above the other, the primary seal being a metallic shoe seal
GRP-TK10	40 CFR Part 60, Subpart Kb	60KB-01	Product Stored = Waste mixture of indeterminate or variable composition Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is greater than or equal to 0.75 psia but less than 11.1 psia Storage Vessel Description = Pontoon-type or double-deck-type external floating roof with liquid-mounted primary seal
GRP-TK10	40 CFR Part 61, Subpart FF	61FF-01	Waste Treatment Tank = The tank manages, treats or stores a waste stream subject to 40 CFR Part 61, Subpart FF. Alternative Standard for Tanks = The tank is complying with the alternative standards in 40 CFR § 61.351. Kb Tank Type = Using an external floating roof that meets the requirements of 40 CFR § 60.112b(a)(2) Seal Type = Mechanical shoe primary seal
GRP-TK10	40 CFR Part 63, Subpart EEEE	63EEEE-1	PRODUCT STORED = Organic HAP containing liquid other than crude oil.
GRP-TK11	40 CFR Part 60, Subpart Kb	60KB-01	Product Stored = Petroleum liquid (other than petroleum or condensate) Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia
GRP-TK11	40 CFR Part 63, Subpart CC	63CC-01	Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1) - (6). Subject to 40 CFR Part 63 Subparts F, G, H or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I. Existing Kb Source = The storage vessel is not part of an existing source or is not subject to the provisions of 40 CFR Part 60, Subpart Kb. Group 1 Storage Vessel = The storage vessel is a Group 2 vessel. Applicability = The storage vessel is required to comply with 40 CFR Part 63, Subpart CC and is part of a process unit.
GRP-TK12	40 CFR Part 60, Subpart Kb	60KB-01	Product Stored = Crude oil stored, processed, and/or treated prior to custody transfer Storage Capacity = Capacity is greater than 420,000 gallons (1,589,874 liters) Maximum True Vapor Pressure = True vapor pressure is greater than or equal to 0.75 psia but less than 11.1 psia Storage Vessel Description = Pontoon-type or double-deck-type external floating roof with mechanical shoe primary seal Reid Vapor Pressure = Reid vapor pressure is greater than or equal to 2.0 psia

Unit ID	Regulation	Index Number	Basis of Determination*
GRP-TK12	40 CFR Part 63, Subpart CC	63CC-01	Product Stored = Crude oil Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1) - (6). Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,416 liters) Subject to 40 CFR Part 63 Subparts F, G, H or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I. Existing Kb Source = The storage vessel is part of an existing source and is also subject to the provisions of 40 CFR Part 60, Subpart Kb. Maximum TVP = True vapor pressure is greater than or equal to 0.75 psia but less than 11.1 psia Storage Vessel Description = Pontoon-type or double-deck-type external floating roof a with mechanical shoe primary seal Reid Vapor Pressure = Reid vapor pressure is greater than or equal to 2.0 psia
GRP-TK13	40 CFR Part 60, Subpart K	60K-1	Construction/Modification Date = On or before June 11, 1973
GRP-TK13	40 CFR Part 63, Subpart CC	63CC-01	Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1) - (6). Subject to 40 CFR Part 63 Subparts F, G, H or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I. Existing Kb Source = The storage vessel is not part of an existing source or is not subject to the provisions of 40 CFR Part 60, Subpart Kb. Group 1 Storage Vessel = The storage vessel is a Group 2 vessel. Applicability = The storage vessel is required to comply with 40 CFR Part 63, Subpart CC and is part of a process unit.
GRP-TK14	40 CFR Part 60, Subpart K	60K-01	Construction/Modification Date = On or before June 11, 1973
GRP-TK15	40 CFR Part 60, Subpart Kb	60KB-01	Product Stored = Petroleum liquid (other than petroleum or condensate) Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia
GRP-TK16	40 CFR Part 60, Subpart Kb	60KB-01	Product Stored = Waste mixture of indeterminate or variable composition Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is greater than or equal to 0.75 psia but less than 11.1 psia Storage Vessel Description = Fixed roof with an internal floating roof using two seals mounted one above the other to form a continuous closure
GRP-TK16	40 CFR Part 61, Subpart FF	61FF-01	Waste Treatment Tank = The tank manages, treats or stores a waste stream subject to 40 CFR Part 61, Subpart FF. Alternative Standard for Tanks = The tank is complying with the alternative standards in 40 CFR § 61.351. Kb Tank Type = Using a fixed roof and internal floating roof, that meets the requirements of 40 CFR § 60.112b(a)(1) Seal Type = Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the vessel and the edge of the internal floating roof.
GRP-TK16	40 CFR Part 63, Subpart EEEE	63EEEE-1	PRODUCT STORED = Organic HAP containing liquid other than crude oil.
GRP-TK17	40 CFR Part 60, Subpart Kb	60KB-02	Product Stored = Waste mixture of indeterminate or variable composition Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is greater than or equal to 0.75 psia but less than 11.1 psia Storage Vessel Description = Pontoon-type or double-deck-type external floating roof with mechanical shoe primary seal

Unit ID	Regulation	Index Number	Basis of Determination*
GRP-TK17	40 CFR Part 61, Subpart FF	61FF-01	Waste Treatment Tank = The tank manages, treats or stores a waste stream subject to 40 CFR Part 61, Subpart FF. Alternative Standard for Tanks = The tank is complying with the alternative standards in 40 CFR § 61.351. Kb Tank Type = Using an external floating roof that meets the requirements of 40 CFR § 60.112b(a)(2) Seal Type = Mechanical shoe primary seal
GRP-TK17	40 CFR Part 63, Subpart EEEE	63EEEE-1	PRODUCT STORED = Organic HAP containing liquid other than crude oil.
GRP-TK18	40 CFR Part 60, Subpart K	60K-01	Construction/Modification Date = On or before June 11, 1973
GRP-TK18	40 CFR Part 63, Subpart CC	63CC-01	Existing Source = The storage vessel is at an existing source. Product Stored = Refined petroleum products Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1) - (6). Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,416 liters) Subject to 40 CFR Part 63 Subparts F, G, H or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I. True Vapor Pressure = Maximum true vapor pressure of the total organic HAPs in the liquid is less than 11.11 psi (76.6 kPa) Emission Control Type = External floating roof Existing Kb Source = The storage vessel is not part of an existing source or is not subject to the provisions of 40 CFR Part 60, Subpart Kb. Maximum TVP = True vapor pressure is greater than or equal to 0.75 psia but less than 11.1 psia Group 1 Storage Vessel = The storage vessel is a Group 1 storage vessel (as defined in 40 CFR § 63.641) Storage Vessel Description = Pontoon-type or double-deck-type external floating roof a with mechanical shoe primary seal Seal Type = Two seals, one above the other, the primary seal being a metallic shoe seal
GRP-TK19	40 CFR Part 60, Subpart Kb	60Kb-01	Product Stored = Crude oil stored, processed, and/or treated after custody transfer Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is greater than or equal to 0.75 psia but less than 11.1 psia Storage Vessel Description = Pontoon-type or double-deck-type external floating roof with mechanical shoe primary seal Reid Vapor Pressure = Reid vapor pressure is greater than or equal to 2.0 psia
GRP-TK19	40 CFR Part 63, Subpart CC	63CC-01	Product Stored = Crude oil Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1) - (6). Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,416 liters) Subject to 40 CFR Part 63 Subparts F, G, H or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I. Existing Kb Source = The storage vessel is part of an existing source and is also subject to the provisions of 40 CFR Part 60, Subpart Kb. Maximum TVP = True vapor pressure is greater than or equal to 0.75 psia but less than 11.1 psia Storage Vessel Description = Pontoon-type or double-deck-type external floating roof a with mechanical shoe primary seal Reid Vapor Pressure = Reid vapor pressure is greater than or equal to 2.0 psia
GRP-TK2	40 CFR Part 60, Subpart K	60K-01	Construction/Modification Date = On or before June 11, 1973

Unit ID	Regulation	Index Number	Basis of Determination*
GRP-TK2	40 CFR Part 63, Subpart CC	63CC-01	Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1) - (6). Subject to 40 CFR Part 63 Subparts F, G, H or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I. Existing Kb Source = The storage vessel is not part of an existing source or is not subject to the provisions of 40 CFR Part 60, Subpart Kb. Group 1 Storage Vessel = The storage vessel is a Group 2 vessel. Applicability = The storage vessel is required to comply with 40 CFR Part 63, Subpart CC and is part of a process unit.
GRP-TK20	40 CFR Part 60, Subpart Kb	60Kb-01	Product Stored = Petroleum liquid (other than petroleum or condensate) Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is greater than or equal to 0.75 psia but less than 11.1 psia Storage Vessel Description = Pontoon-type or double-deck-type external floating roof with mechanical shoe primary seal
GRP-TK20	40 CFR Part 63, Subpart CC	63CC-01	Product Stored = Refined petroleum products Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1) - (6). Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,416 liters) Subject to 40 CFR Part 63 Subparts F, G, H or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I. Existing Kb Source = The storage vessel is part of an existing source and is also subject to the provisions of 40 CFR Part 60, Subpart Kb. Maximum TVP = True vapor pressure is greater than or equal to 0.75 psia but less than 11.1 psia Storage Vessel Description = Pontoon-type or double-deck-type external floating roof a with mechanical shoe primary seal
GRP-TK3	40 CFR Part 60, Subpart K	60K-01	Construction/Modification Date = On or before June 11, 1973
GRP-TK4	40 CFR Part 60, Subpart K	60K-01	Construction/Modification Date = On or before June 11, 1973
GRP-TK5	40 CFR Part 60, Subpart Kb	60KB-01	Product Stored = Volatile organic liquid Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)
GRP-TK6	40 CFR Part 60, Subpart K	60K-01	Construction/Modification Date = On or before June 11, 1973
GRP-TK6	40 CFR Part 63, Subpart CC	63CC-01	Existing Source = The storage vessel is at an existing source. Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1) - (6). Subject to 40 CFR Part 63 Subparts F, G, H or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I. True Vapor Pressure = Maximum true vapor pressure of the total organic HAPs in the liquid is less than 11.11 psi (76.6 kPa) Emission Control Type = Fixed roof and an internal floating roof Existing Kb Source = The storage vessel is not part of an existing source or is not subject to the provisions of 40 CFR Part 60, Subpart Kb. Group 1 Storage Vessel = The storage vessel is a Group 1 storage vessel (as defined in 40 CFR § 63.641) Seal Type = Metallic shoe seal (as defined in 40 CFR § 63.111)
GRP-TK7	40 CFR Part 60, Subpart K	60K-01	Construction/Modification Date = On or before June 11, 1973

Unit ID	Regulation	Index Number	Basis of Determination*
GRP-TK7	40 CFR Part 63, Subpart CC	63CC-01	Existing Source = The storage vessel is at an existing source. Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1) - (6). Subject to 40 CFR Part 63 Subparts F, G, H or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I. True Vapor Pressure = Maximum true vapor pressure of the total organic HAPs in the liquid is less than 11.11 psi (76.6 kPa) Emission Control Type = Fixed roof and an internal floating roof Existing Kb Source = The storage vessel is not part of an existing source or is not subject to the provisions of 40 CFR Part 60, Subpart Kb. Group 1 Storage Vessel = The storage vessel is a Group 2 vessel. Applicability = The storage vessel is required to comply with 40 CFR Part 63, Subpart CC and is part of a process unit. Seal Type = Metallic shoe seal (as defined in 40 CFR § 63.111)
GRP-TK8	40 CFR Part 60, Subpart Kb	60KB-01	Product Stored = Petroleum liquid (other than petroleum or condensate) Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia
GRP-TK9	40 CFR Part 60, Subpart Kb	KB-01	Product Stored = Petroleum liquid (other than petroleum or condensate) Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is greater than or equal to 0.75 psia but less than 11.1 psia Storage Vessel Description = Pontoon-type or double-deck-type external floating roof with mechanical shoe primary seal
GRP-TK9	40 CFR Part 63, Subpart CC	63CC-01	Product Stored = Refined petroleum products Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1) - (6). Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,416 liters) Subject to 40 CFR Part 63 Subparts F, G, H or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I. Existing Kb Source = The storage vessel is part of an existing source and is also subject to the provisions of 40 CFR Part 60, Subpart Kb. Maximum TVP = True vapor pressure is greater than or equal to 0.75 psia but less than 11.1 psia Storage Vessel Description = Pontoon-type or double-deck-type external floating roof a with mechanical shoe primary seal
GRP-WW	40 CFR Part 61, Subpart FF	61FF-01	Bypass Line = The closed vent system does not contain any by-pass line that could divert the vent stream away from the control device. Tank Control Requirements = The tank has a fixed roof and closed vent system routing vapors to either a fuel gas system or control device. Waste Treatment Tank = The tank manages, treats or stores a waste stream subject to 40 CFR Part 61, Subpart FF. Alternative Standard for Tanks = The tank is not complying with the alternative standards in 40 CFR § 61.351. Fuel Gas System = Gaseous emissions from the tank or enclosure are not routed to a fuel gas system. Control Device Type/Operations = Flare Cover and Closed Vent = The cover and closed vent system are not operated such that the tank is maintained at a pressure less than atmospheric pressure and meets the conditions of 40 CFR § 61.343(a)(1)(i)(C)(1) - (3). Closed Vent System and Control Device AMOC = Not using an alternate means of compliance Engineering Calculations = Results of performance tests are used to demonstrate that the control device achieves emission limitation. Alternative Means of Compliance = Not using an alternate means of compliance to meet the requirements of 40 CFR § 61.343 for tanks.

Unit ID	Regulation	Index Number	Basis of Determination*
S-006	40 CFR Part 60, Subpart Kb	60Kb-01	Product Stored = Petroleum liquid (other than petroleum or condensate) Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is greater than or equal to 0.75 psia but less than 11.1 psia Storage Vessel Description = Pontoon-type or double-deck-type external floating roof with mechanical shoe primary seal
S-006	40 CFR Part 63, Subpart CC	63CC-01	Existing Source = The storage vessel is at an existing source. Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1) - (6). Subject to 40 CFR Part 63 Subparts F, G, H or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I. True Vapor Pressure = Maximum true vapor pressure of the total organic HAPs in the liquid is less than 11.11 psi (76.6 kPa) Emission Control Type = External floating roof Existing Kb Source = The storage vessel is not part of an existing source or is not subject to the provisions of 40 CFR Part 60, Subpart Kb. Group 1 Storage Vessel = The storage vessel is a Group 1 storage vessel (as defined in 40 CFR § 63.641) Seal Type = Two seals, one above the other, the primary seal being a metallic shoe seal
S-018	40 CFR Part 60, Subpart K	60K-01	Construction/Modification Date = On or before June 11, 1973
S-018	40 CFR Part 63, Subpart CC	63CC-01	Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1) - (6). Subject to 40 CFR Part 63 Subparts F, G, H or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I. Existing Kb Source = The storage vessel is not part of an existing source or is not subject to the provisions of 40 CFR Part 60, Subpart Kb. Group 1 Storage Vessel = The storage vessel is a Group 2 vessel. Applicability = The storage vessel is required to comply with 40 CFR Part 63, Subpart CC and is part of a process unit.
S-018	40 CFR Part 63, Subpart CC	63CC-02	Existing Source = The storage vessel is at an existing source. Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1) - (6). Subject to 40 CFR Part 63 Subparts F, G, H or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I. True Vapor Pressure = Maximum true vapor pressure of the total organic HAPs in the liquid is less than 11.11 psi (76.6 kPa) Emission Control Type = External floating roof Existing Kb Source = The storage vessel is not part of an existing source or is not subject to the provisions of 40 CFR Part 60, Subpart Kb. Group 1 Storage Vessel = The storage vessel is a Group 1 storage vessel (as defined in 40 CFR § 63.641) Seal Type = Two seals, one above the other, the primary seal being a metallic shoe seal
S-019	40 CFR Part 60, Subpart K	60K-01	Construction/Modification Date = On or before June 11, 1973
S-019	40 CFR Part 63, Subpart CC	63CC-01	Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1) - (6). Subject to 40 CFR Part 63 Subparts F, G, H or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I. Existing Kb Source = The storage vessel is not part of an existing source or is not subject to the provisions of 40 CFR Part 60, Subpart Kb. Group 1 Storage Vessel = The storage vessel is a Group 2 vessel. Applicability = The storage vessel is required to comply with 40 CFR Part 63, Subpart CC and is part of a process unit.

Unit ID	Regulation	Index Number	Basis of Determination*
S-019	40 CFR Part 63, Subpart CC	63CC-02	Existing Source = The storage vessel is at an existing source. Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1) - (6). Subject to 40 CFR Part 63 Subparts F, G, H or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I. True Vapor Pressure = Maximum true vapor pressure of the total organic HAPs in the liquid is less than 11.11 psi (76.6 kPa) Emission Control Type = External floating roof Existing Kb Source = The storage vessel is not part of an existing source or is not subject to the provisions of 40 CFR Part 60, Subpart Kb. Group 1 Storage Vessel = The storage vessel is a Group 1 storage vessel (as defined in 40 CFR § 63.641) Seal Type = Two seals, one above the other, the primary seal being a metallic shoe seal
S-023	40 CFR Part 60, Subpart K	60K-01	Construction/Modification Date = On or before June 11, 1973
S-023	40 CFR Part 63, Subpart CC	63CC-01	Existing Source = The storage vessel is at an existing source. Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1) - (6). Subject to 40 CFR Part 63 Subparts F, G, H or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I. True Vapor Pressure = Maximum true vapor pressure of the total organic HAPs in the liquid is less than 11.11 psi (76.6 kPa) Emission Control Type = External floating roof Existing Kb Source = The storage vessel is not part of an existing source or is not subject to the provisions of 40 CFR Part 60, Subpart Kb. Group 1 Storage Vessel = The storage vessel is a Group 2 vessel. Applicability = The storage vessel is required to comply with 40 CFR Part 63, Subpart CC and is part of a process unit. Seal Type = Two seals, one above the other, the primary seal being a metallic shoe seal
S-023	40 CFR Part 63, Subpart CC	63CC-02	Existing Source = The storage vessel is at an existing source. Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1) - (6). Subject to 40 CFR Part 63 Subparts F, G, H or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I. True Vapor Pressure = Maximum true vapor pressure of the total organic HAPs in the liquid is less than 11.11 psi (76.6 kPa) Emission Control Type = External floating roof Existing Kb Source = The storage vessel is not part of an existing source or is not subject to the provisions of 40 CFR Part 60, Subpart Kb. Group 1 Storage Vessel = The storage vessel is a Group 1 storage vessel (as defined in 40 CFR § 63.641) Seal Type = Two seals, one above the other, the primary seal being a metallic shoe seal
S-033	40 CFR Part 60, Subpart K	60K-01	Construction/Modification Date = On or before June 11, 1973

Unit ID	Regulation	Index Number	Basis of Determination*
S-033	40 CFR Part 63, Subpart CC	63CC-01	Existing Source = The storage vessel is at an existing source. Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1) - (6). Subject to 40 CFR Part 63 Subparts F, G, H or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I. True Vapor Pressure = Maximum true vapor pressure of the total organic HAPs in the liquid is less than 11.11 psi (76.6 kPa) Emission Control Type = Fixed roof and an internal floating roof Existing Kb Source = The storage vessel is not part of an existing source or is not subject to the provisions of 40 CFR Part 60, Subpart Kb. Group 1 Storage Vessel = The storage vessel is a Group 1 storage vessel (as defined in 40 CFR § 63.641) Seal Type = Metallic shoe seal (as defined in 40 CFR § 63.111)
S-090	40 CFR Part 60, Subpart K	60K-01	Construction/Modification Date = On or before June 11, 1973
S-090	40 CFR Part 63, Subpart CC	63CC-01	Existing Source = The storage vessel is at an existing source. Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1) - (6). Subject to 40 CFR Part 63 Subparts F, G, H or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I. True Vapor Pressure = Maximum true vapor pressure of the total organic HAPs in the liquid is less than 11.11 psi (76.6 kPa) Emission Control Type = Fixed roof and an internal floating roof Existing Kb Source = The storage vessel is not part of an existing source or is not subject to the provisions of 40 CFR Part 60, Subpart Kb. Group 1 Storage Vessel = The storage vessel is a Group 1 storage vessel (as defined in 40 CFR § 63.641) Seal Type = Two seals mounted one above the other so that each forms a continuous closure that completely cover the space between the wall of the storage vessel and the edge of the internal floating roof
S-143	40 CFR Part 63, Subpart CC	63CC-01	Existing Source = The storage vessel is at an existing source. Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1) - (6). Subject to 40 CFR Part 63 Subparts F, G, H or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I. True Vapor Pressure = Maximum true vapor pressure of the total organic HAPs in the liquid is less than 11.11 psi (76.6 kPa) Emission Control Type = External floating roof Existing Kb Source = The storage vessel is not part of an existing source or is not subject to the provisions of 40 CFR Part 60, Subpart Kb. Group 1 Storage Vessel = The storage vessel is a Group 1 storage vessel (as defined in 40 CFR § 63.641) Seal Type = Two seals, one above the other, the primary seal being a metallic shoe seal
S-144	40 CFR Part 60, Subpart Ka	60KA-01	Product Stored = Petroleum liquid (other than petroleum or condensate) Storage Capacity = Capacity is greater than 40,000 gallons (151,416 liters) True Vapor Pressure = TVP is less than 1.5 psia Storage Vessel Description = Pontoon-type or double-deck-type external floating roof (EFR) with mechanical shoe primary seal Reid Vapor Pressure = Reid vapor pressure is less than 1.0 psia Maximum True Vapor Pressure = Maximum true vapor pressure is less than or equal to 1.0 psia

Unit ID	Regulation	Index Number	Basis of Determination*
S-144	40 CFR Part 63, Subpart CC	63CC-01	Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1) - (6). Subject to 40 CFR Part 63 Subparts F, G, H or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I. Existing Kb Source = The storage vessel is not part of an existing source or is not subject to the provisions of 40 CFR Part 60, Subpart Kb. Group 1 Storage Vessel = The storage vessel is a Group 2 vessel. Applicability = The storage vessel is required to comply with 40 CFR Part 63, Subpart CC and is part of a process unit.
S-150	40 CFR Part 60, Subpart Ka	60KA-01	Product Stored = Petroleum liquid (other than petroleum or condensate) Storage Capacity = Capacity is greater than 40,000 gallons (151,416 liters) True Vapor Pressure = TVP is less than 1.5 psia Storage Vessel Description = Emission controls not required (fixed roof) Reid Vapor Pressure = Reid vapor pressure is less than 1.0 psia Maximum True Vapor Pressure = Maximum true vapor pressure is less than or equal to 1.0 psia
S-150	40 CFR Part 63, Subpart CC	63CC-01	Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1) - (6). Subject to 40 CFR Part 63 Subparts F, G, H or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I. Existing Kb Source = The storage vessel is not part of an existing source or is not subject to the provisions of 40 CFR Part 60, Subpart Kb. Group 1 Storage Vessel = The storage vessel is a Group 2 vessel. Applicability = The storage vessel is required to comply with 40 CFR Part 63, Subpart CC and is part of a process unit.
S-176	40 CFR Part 63, Subpart CC	63CC-01	Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1) - (6). Subject to 40 CFR Part 63 Subparts F, G, H or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I. Existing Kb Source = The storage vessel is not part of an existing source or is not subject to the provisions of 40 CFR Part 60, Subpart Kb. Group 1 Storage Vessel = The storage vessel is a Group 2 vessel. Applicability = The storage vessel is subject to the control requirements of 40 CFR Part 60, Subpart Ka Storage Vessel Description = Pontoon-type or double-deck-type external floating roof with mechanical shoe primary seal
S-177	40 CFR Part 60, Subpart Ka	60KA-01	Product Stored = Crude oil stored, processed, and/or treated prior to custody transfer Storage Capacity = Capacity is 420,000 gallons (1,589,873 liters) or greater True Vapor Pressure = TVP is less than 1.5 psia Storage Vessel Description = Emission controls not required (fixed roof) Reid Vapor Pressure = Reid vapor pressure is less than 1.0 psia Maximum True Vapor Pressure = Maximum true vapor pressure is less than or equal to 1.0 psia
S-177	40 CFR Part 63, Subpart CC	63CC-01	Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1) - (6). Subject to 40 CFR Part 63 Subparts F, G, H or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I. Existing Kb Source = The storage vessel is not part of an existing source or is not subject to the provisions of 40 CFR Part 60, Subpart Kb. Group 1 Storage Vessel = The storage vessel is a Group 2 vessel. Applicability = The storage vessel is required to comply with 40 CFR Part 63, Subpart CC and is part of a process unit.

Unit ID	Regulation	Index Number	Basis of Determination*
S-183	40 CFR Part 60, Subpart Kb	60KB-01	Product Stored = Crude oil stored, processed, and/or treated prior to custody transfer Storage Capacity = Capacity is greater than 420,000 gallons (1,589,874 liters) Maximum True Vapor Pressure = True vapor pressure is greater than or equal to 0.75 psia but less than 11.1 psia Storage Vessel Description = Fixed roof with an internal floating roof using a mechanical shoe seal Reid Vapor Pressure = Reid vapor pressure is greater than or equal to 2.0 psia
S-183	40 CFR Part 63, Subpart CC	63CC-01	Product Stored = Crude oil Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1) - (6). Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,416 liters) Subject to 40 CFR Part 63 Subparts F, G, H or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I. Existing Kb Source = The storage vessel is part of an existing source and is also subject to the provisions of 40 CFR Part 60, Subpart Kb. Maximum TVP = True vapor pressure is greater than or equal to 0.75 psia but less than 11.1 psia Storage Vessel Description = Fixed roof with an internal floating roof using a mechanical shoe seal Reid Vapor Pressure = Reid vapor pressure is greater than or equal to 2.0 psia
S-184	40 CFR Part 60, Subpart Kb	60KB-01	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is greater than or equal to 0.75 psia but less than 11.1 psia Storage Vessel Description = Fixed roof with an internal floating roof using a mechanical shoe seal
S-184	40 CFR Part 63, Subpart CC	63CC-01	Product Stored = Volatile organic liquid other than crude oil, refined petroleum products or waste of variable or indeterminate composition Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1) - (6). Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,416 liters) Subject to 40 CFR Part 63 Subparts F, G, H or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I. Existing Kb Source = The storage vessel is part of an existing source and is also subject to the provisions of 40 CFR Part 60, Subpart Kb. Maximum TVP = True vapor pressure is greater than or equal to 0.75 psia but less than 11.1 psia Storage Vessel Description = Fixed roof with an internal floating roof using a mechanical shoe seal
S-186	40 CFR Part 60, Subpart Kb	60KB-01	Product Stored = Crude oil stored, processed, and/or treated prior to custody transfer Storage Capacity = Capacity is greater than 420,000 gallons (1,589,874 liters) Maximum True Vapor Pressure = True vapor pressure is greater than or equal to 0.75 psia but less than 11.1 psia Storage Vessel Description = Fixed roof with an internal floating roof using a liquid-mounted seal Reid Vapor Pressure = Reid vapor pressure is greater than or equal to 2.0 psia

Unit ID	Regulation	Index Number	Basis of Determination*
S-186	40 CFR Part 63, Subpart CC	63CC-01	Product Stored = Crude oil Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1) - (6). Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,416 liters) Subject to 40 CFR Part 63 Subparts F, G, H or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I. Existing Kb Source = The storage vessel is part of an existing source and is also subject to the provisions of 40 CFR Part 60, Subpart Kb. Maximum TVP = True vapor pressure is greater than or equal to 0.75 psia but less than 11.1 psia Storage Vessel Description = Fixed roof with an internal floating roof using a liquid-mounted seal Reid Vapor Pressure = Reid vapor pressure is greater than or equal to 2.0 psia
S-187	40 CFR Part 60, Subpart Kb	60KB-01	Product Stored = Petroleum liquid (other than petroleum or condensate) Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is greater than or equal to 0.75 psia but less than 11.1 psia Storage Vessel Description = Fixed roof with an internal floating roof using two seals mounted one above the other to form a continuous closure
S-187	40 CFR Part 63, Subpart CC	63CC-01	Product Stored = Refined petroleum products Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1) - (6). Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,416 liters) Subject to 40 CFR Part 63 Subparts F, G, H or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I. Existing Kb Source = The storage vessel is part of an existing source and is also subject to the provisions of 40 CFR Part 60, Subpart Kb. Maximum TVP = True vapor pressure is greater than or equal to 0.75 psia but less than 11.1 psia Storage Vessel Description = Fixed roof with an internal floating roof using a liquid-mounted seal
S-194	40 CFR Part 60, Subpart Kb	60KB-01	Product Stored = Crude oil stored, processed, and/or treated prior to custody transfer Storage Capacity = Capacity is greater than 420,000 gallons (1,589,874 liters) Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia
S-194	40 CFR Part 63, Subpart CC	63CC-01	Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1) - (6). Subject to 40 CFR Part 63 Subparts F, G, H or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I. Existing Kb Source = The storage vessel is not part of an existing source or is not subject to the provisions of 40 CFR Part 60, Subpart Kb. Group 1 Storage Vessel = The storage vessel is a Group 2 vessel. Applicability = The storage vessel is required to comply with 40 CFR Part 63, Subpart CC and is part of a process unit.
S-200	40 CFR Part 60, Subpart Kb	60KB-01	Product Stored = Petroleum liquid (other than petroleum or condensate) Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is greater than or equal to 0.75 psia but less than 11.1 psia Storage Vessel Description = Fixed roof with an internal floating roof using a mechanical shoe seal

Unit ID	Regulation	Index Number	Basis of Determination*
S-200	40 CFR Part 63, Subpart CC	63CC-01	Product Stored = Refined petroleum products Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1) - (6). Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,416 liters) Subject to 40 CFR Part 63 Subparts F, G, H or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I. Existing Kb Source = The storage vessel is part of an existing source and is also subject to the provisions of 40 CFR Part 60, Subpart Kb. Maximum TVP = True vapor pressure is greater than or equal to 0.75 psia but less than 11.1 psia Storage Vessel Description = Fixed roof with an internal floating roof using a mechanical shoe seal
S-204	40 CFR Part 60, Subpart Kb	60KB-01	Product Stored = Petroleum liquid (other than petroleum or condensate) Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia
S-204	40 CFR Part 63, Subpart CC	63CC-01	Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1) - (6). Subject to 40 CFR Part 63 Subparts F, G, H or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I. Existing Kb Source = The storage vessel is not part of an existing source or is not subject to the provisions of 40 CFR Part 60, Subpart Kb. Group 1 Storage Vessel = The storage vessel is a Group 2 vessel. Applicability = The storage vessel is required to comply with 40 CFR Part 63, Subpart CC and is part of a process unit.
S-229	40 CFR Part 60, Subpart Kb	60Kb	Product Stored = Petroleum liquid (other than petroleum or condensate) Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is greater than or equal to 0.75 psia but less than 11.1 psia Storage Vessel Description = Pontoon-type or double-deck-type external floating roof with mechanical shoe primary seal
S-229	40 CFR Part 63, Subpart CC	63CC	Existing Source = The storage vessel is at an existing source. Product Stored = Refined petroleum products Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1) - (6). Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,416 liters) Subject to 40 CFR Part 63 Subparts F, G, H or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I. True Vapor Pressure = Maximum true vapor pressure of the total organic HAPs in the liquid is less than 11.11 psi (76.6 kPa) Emission Control Type = External floating roof Existing Kb Source = The storage vessel is part of an existing source and is also subject to the provisions of 40 CFR Part 60, Subpart Kb. Maximum TVP = True vapor pressure is greater than or equal to 0.75 psia but less than 11.1 psia Storage Vessel Description = Pontoon-type or double-deck-type external floating roof a with mechanical shoe primary seal Seal Type = Two seals, one above the other, the primary seal being a metallic shoe seal
S-232	40 CFR Part 60, Subpart Kb	60Kb-01	Product Stored = Petroleum liquid (other than petroleum or condensate) Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is greater than or equal to 0.75 psia but less than 11.1 psia Storage Vessel Description = Pontoon-type or double-deck-type external floating roof with mechanical shoe primary seal

Unit ID	Regulation	Index Number	Basis of Determination*
S-232	40 CFR Part 63, Subpart CC	63CC-01	Product Stored = Refined petroleum products Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1) - (6). Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,416 liters) Subject to 40 CFR Part 63 Subparts F, G, H or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I. Existing Kb Source = The storage vessel is part of an existing source and is also subject to the provisions of 40 CFR Part 60, Subpart Kb. Maximum TVP = True vapor pressure is greater than or equal to 0.75 psia but less than 11.1 psia Storage Vessel Description = Pontoon-type or double-deck-type external floating roof a with mechanical shoe primary seal
S-233	40 CFR Part 60, Subpart Kb	60Kb-01	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is greater than or equal to 0.75 psia but less than 11.1 psia Storage Vessel Description = Pontoon-type or double-deck-type external floating roof with mechanical shoe primary seal
S-233	40 CFR Part 63, Subpart CC	63CC-01	Product Stored = Volatile organic liquid other than crude oil, refined petroleum products or waste of variable or indeterminate composition Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1) - (6). Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,416 liters) Subject to 40 CFR Part 63 Subparts F, G, H or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I. Existing Kb Source = The storage vessel is part of an existing source and is also subject to the provisions of 40 CFR Part 60, Subpart Kb. Maximum TVP = True vapor pressure is greater than or equal to 0.75 psia but less than 11.1 psia Storage Vessel Description = Pontoon-type or double-deck-type external floating roof a with mechanical shoe primary seal
S-234	40 CFR Part 60, Subpart Kb	60Kb-01	Product Stored = Petroleum liquid (other than petroleum or condensate) Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia
S-234	40 CFR Part 63, Subpart CC	63CC-01	Product Stored = Refined petroleum products Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1) - (6). Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,416 liters) Subject to 40 CFR Part 63 Subparts F, G, H or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I. Existing Kb Source = The storage vessel is part of an existing source and is also subject to the provisions of 40 CFR Part 60, Subpart Kb. Maximum TVP = True vapor pressure is less than 0.75 psia Storage Vessel Description = No floating roof
L-11	40 CFR Part 61, Subpart BB	63BB-01	NEGATIVE APPLICABILITY [NESHAP BB] = The loading rack loads only benzene-laden waste, gasoline, crude oil, natural gas liquids, petroleum distillates or benzene-laden liquid from a coke by-product plant.
L-11	40 CFR Part 63, Subpart CC	63CC-GASLDG	SPECIFIED IN 40 CFR 63.640(G)(1)-(6) = The gasoline loading rack or marine vessel loading operation is not part of a process specified in 40 CFR § 63.640(g)(1) - (6). SUBJECT TO 40 CFR SUBPARTS F, G, H, OR I = The gasoline loading rack or marine vessel loading operation is not subject to 40 CFR Part 63, Subparts F, G, H, or I. UNIT TYPE = Gasoline loading rack classified under Standard Industrial Classification code 2911. VAPOR PROCESSING SYSTEM = THERMAL OXIDATION SYSTEM

Unit ID	Regulation	Index Number	Basis of Determination*
L-11	40 CFR Part 63, Subpart CC	ALL-OTHLDG	SPECIFIED IN 40 CFR 63.640(G)(1)-(6) = The gasoline loading rack or marine vessel loading operation is not part of a process specified in 40 CFR § 63.640(g)(1) - (6). SUBJECT TO 40 CFR SUBPARTS F, G, H, OR I = The gasoline loading rack or marine vessel loading operation is not subject to 40 CFR Part 63, Subparts F, G, H, or I. UNIT TYPE = Gasoline loading rack not classified under Standard Industrial Classification code 2911 or marine vessel loading operation at a petroleum refinery not meeting the applicability criteria of 40 CFR § 63.560.
L-15	40 CFR Part 61, Subpart BB	61BB	NEGATIVE APPLICABILITY [NESHAP BB] = The loading rack loads materials other than benzene-laden waste, gasoline, crude oil, natural gas liquids, petroleum distillates or benzene-laden liquid from a coke by-product plant. BENZENE BY WEIGHT [NESHAP BB] = Concentration of benzene by weight in the liquid which is loaded is less than 70% benzene by weight. ANNUAL AMOUNT LOADED [NESHAP BB] = Annual amount loaded is greater than or equal to 1.3 million liters (343,424 gallons).
B-12	40 CFR Part 60, Subpart D	60D-01	CONSTRUCTION/MODIFICATION DATE = After December 22, 1976, and on or before September 18, 1978. COVERED UNDER SUBPART DA = The steam generating unit is not covered under 40 CFR Part 60, Subpart Da. 40 CFR 60 (NSPS) D CHANGES TO EXISTING AFFECTED FACILITY [NSPS D] = No change has been made to the existing fossil fuel-fired steam generating unit. 40 CFR 60 (NSPS) SUBPART D HEAT INPUT RATE = Heat input rate is less than or equal to 250 MMBtu/hr (73 MW).
B-13	40 CFR Part 60, Subpart D	60D-01	CONSTRUCTION/MODIFICATION DATE = After August 17, 1971, and on or before December 22, 1976. COVERED UNDER SUBPART DA = The steam generating unit is not covered under 40 CFR Part 60, Subpart Da. 40 CFR 60 (NSPS) D CHANGES TO EXISTING AFFECTED FACILITY [NSPS D] = No change has been made to the existing fossil fuel-fired steam generating unit. 40 CFR 60 (NSPS) SUBPART D HEAT INPUT RATE = Heat input rate is less than or equal to 250 MMBtu/hr (73 MW).
B-13	40 CFR Part 60, Subpart Dc	60Dc	CONSTRUCTION/MODIFICATION DATE = On or before June 9, 1989.

Unit ID	Regulation	Index Number	Basis of Determination*
B-22	40 CFR Part 60, Subpart Db	60Db-01	40 CFR 60 (NSPS) SUBPART DB FUEL TYPE #1 = Gaseous fossil fuel other than natural gas and coal-derived synthetic fuel meeting the definition of natural gas. 60.42B(K)(2) LOW SULFUR EXEMPTION = The § 60.42b(k)(2) exemption applies. CONSTRUCTION/MODIFICATION DATE = Constructed or reconstructed after February 28, 2005. 40 CFR 60 (NSPS) SUBPART DB HEAT INPUT CAPACITY = Heat input capacity is greater than 100 MMBtu/hr (29 MW) but less than or equal to 250 MMBtu/hr (73 MW). PM MONITORING TYPE = No particulate monitoring. 40 CFR 60 (NSPS) SUBPART DA CORRESPONDING APPLICABILITIES [NSPS DB] = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart Da. OPACITY MONITORING TYPE = No particulate (opacity) monitoring. 40 CFR 60 (NSPS) SUBPART DB CHANGES TO EXISTING AFFECTED FACILITY = No change has been made to the existing steam generating unit, which was not previously subject to 40 CFR Part 60, Subpart Db, for the sole purpose of combusting gases containing totally reduced sulfur as defined under 40 CFR § 60.281. NOX MONITORING TYPE = Continuous emission monitoring system. ELECTRICAL OR MECHANICAL OUTPUT = 10% or less of the annual output is electrical or mechanical. SO2 MONITORING TYPE = No SO_2 monitoring. SUBPART EA, EB OR AAAA = The affected facility does not meet applicability requirements of and is subject to 40 CFR Part 60, Subpart Ea, Eb or AAAA. SUBPART J CORRESPONDING APPLICABILITIES = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart J. SUBPART E CORRESPONDING APPLICABILITIES = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart E. SUBPART KKKK = The affected facility is not a heat recovery steam generator associated with combined cycle gas turbines and that meets applicability requirements of and is subject to 40 CFR Part 60, Subpart KKKK. TECHNOLOGY TYPE = Other conventional technology. ACF OPTION - SO2 = Other ACF or no ACF. SUBPART CB OR BBBB = The affected facility is not covered by an EPA approved State or Federal section 111(d)/129 plan implementing 40 CFR Part 60, Subpart Cb or BBBB emission guidelines. UNIT TYPE = Duct burner as part of combined cycle system (compliance on a 30-day rolling average basis determined by using a continuous emission monitoring system). ACF OPTION - PM = Other ACF or no ACF. 60.49DA(N) ALTERNATIVE = The facility is not using the § 60.49Da(n) alternative. ACF OPTION - NOX = Other ACF or no ACF. HEAT INPUT GAS/OIL = The facility does not combust natural gas or distillate oil in excess of 30 % of the heat input from the combustion of all fuels. 60.49DA(M) ALTERNATIVE = The facility is not using the § 60.49Da(m) alternative.
B-22	40 CFR Part 63, Subpart DDDDD	63DDDDD-01	CONSTRUCTION/RECONSTRUCTION DATE = Construction or reconstruction began after June 4, 2010.
GRP-BOILER1	40 CFR Part 60, Subpart D	60D-01	CONSTRUCTION/MODIFICATION DATE = On or before August 17, 1971.
GRP-BOILER1	40 CFR Part 60, Subpart Db	60Db	CONSTRUCTION/MODIFICATION DATE = On or before June 19, 1984.

Unit ID	Regulation	Index Number	Basis of Determination*
GRP-BOILER1	40 CFR Part 63, Subpart DDDDD	63DDDDD-01	CONSTRUCTION/RECONSTRUCTION DATE = Construction or reconstruction began after June 4, 2010.
GRP-BOILER2	40 CFR Part 60, Subpart D	60D-01	CONSTRUCTION/MODIFICATION DATE = On or before August 17, 1971.
GRP-BOILER2	40 CFR Part 63, Subpart DDDDD	63DDDDD-01	CONSTRUCTION/RECONSTRUCTION DATE = Construction or reconstruction began after June 4, 2010.
GRP-HTR-FG	40 CFR Part 63, Subpart DDDDD	63DDDDD-01	CONSTRUCTION/RECONSTRUCTION DATE = Construction or reconstruction began after June 4, 2010.
GRP-HTR-FG2	40 CFR Part 63, Subpart DDDDD	63DDDDD-01	CONSTRUCTION/RECONSTRUCTION DATE = Construction or reconstruction began after June 4, 2010.
H-2	40 CFR Part 63, Subpart DDDDD	63DDDDD-01	CONSTRUCTION/RECONSTRUCTION DATE = Construction or reconstruction began after June 4, 2010.
FL-1	30 TAC Chapter 111, Visible Emissions	R111-01	ACID GASES ONLY [REG I] = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1. EMERGENCY/UPSET CONDITIONS ONLY [REG I] = Flare is used under conditions other than emergency or upset conditions. ALTERNATE OPACITY LIMITATION [REG I] = Not complying with an alternate opacity limit under 30 TAC § 111.113.
FL-1	40 CFR Part 60, Subpart A	60A-01	SUBJECT TO 40 CFR 60.18 = Flare is subject to 40 CFR § 60.18. ADHERING TO HEAT CONTENT SPECIFICATIONS = Adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4). FLARE ASSIST TYPE [NSPS A, NESHAP A, AND/OR MACT A] = Steam-assisted FLARE EXIT VELOCITY [NSPS A, NESHAP A, AND/OR MACT A] = Flare exit velocity is less than 60 ft/s (18.3 m/sec) HEATING VALUE OF GAS [NSPS A, NESHAP A, AND/OR MACT A] = Heating value is less than or equal to 1000 Btu/scf (37.3 MJ/scm).
FL-1	40 CFR Part 63, Subpart A	63A-01	REQUIRED UNDER 40 CFR 63 = Flare is required by a Subpart under 40 CFR Part 63. HEAT CONTENT SPECIFICATION = Adhering to the heat content specifications in 40 CFR § 63.11(b)(6)(ii) and the maximum tip velocity specifications in 40 CFR § 63.11(b)(7) or 40 CFR § 63.11(b)(8). FLARE ASSIST TYPE = Steam assisted FLARE EXIT VELOCITY = Flare exit velocity is less than 60 ft/s (18.3 m/sec)
FL-3	30 TAC Chapter 111, Visible Emissions	R111-01	ACID GASES ONLY [REG I] = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1. EMERGENCY/UPSET CONDITIONS ONLY [REG I] = Flare is used under conditions other than emergency or upset conditions. ALTERNATE OPACITY LIMITATION [REG I] = Not complying with an alternate opacity limit under 30 TAC § 111.113.
FL-3	40 CFR Part 60, Subpart A	60A-01	SUBJECT TO 40 CFR 60.18 = Flare is subject to 40 CFR § 60.18. ADHERING TO HEAT CONTENT SPECIFICATIONS = Adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4). FLARE ASSIST TYPE [NSPS A, NESHAP A, AND/OR MACT A] = Steam-assisted FLARE EXIT VELOCITY [NSPS A, NESHAP A, AND/OR MACT A] = Flare exit velocity is less than 60 ft/s (18.3 m/sec)

Unit ID	Regulation	Index Number	Basis of Determination*
FL-3	40 CFR Part 63, Subpart A	63A-01	REQUIRED UNDER 40 CFR 63 = Flare is required by a Subpart under 40 CFR Part 63. HEAT CONTENT SPECIFICATION = Adhering to the heat content specifications in 40 CFR § 63.11(b)(6)(ii) and the maximum tip velocity specifications in 40 CFR § 63.11(b)(7) or 40 CFR § 63.11(b)(8). FLARE ASSIST TYPE = Steam assisted FLARE EXIT VELOCITY = Flare exit velocity is less than 60 ft/s (18.3 m/sec)
FL-4	30 TAC Chapter 111, Visible Emissions	R111-01	ACID GASES ONLY [REG I] = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1. EMERGENCY/UPSET CONDITIONS ONLY [REG I] = Flare is used under conditions other than emergency or upset conditions. ALTERNATE OPACITY LIMITATION [REG I] = Not complying with an alternate opacity limit under 30 TAC § 111.113.
FL-4	40 CFR Part 60, Subpart A	60A-01	SUBJECT TO 40 CFR 60.18 = Flare is subject to 40 CFR § 60.18. ADHERING TO HEAT CONTENT SPECIFICATIONS = Adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4). FLARE ASSIST TYPE [NSPS A, NESHAP A, AND/OR MACT A] = Steam-assisted FLARE EXIT VELOCITY [NSPS A, NESHAP A, AND/OR MACT A] = Flare exit velocity is less than 60 ft/s (18.3 m/sec)
FL-4	40 CFR Part 63, Subpart A	63A-01	REQUIRED UNDER 40 CFR 63 = Flare is required by a Subpart under 40 CFR Part 63. HEAT CONTENT SPECIFICATION = Adhering to the heat content specifications in 40 CFR § 63.11(b)(6)(ii) and the maximum tip velocity specifications in 40 CFR § 63.11(b)(7) or 40 CFR § 63.11(b)(8). FLARE ASSIST TYPE = Steam assisted FLARE EXIT VELOCITY = Flare exit velocity is less than 60 ft/s (18.3 m/sec)
FL-6	30 TAC Chapter 111, Visible Emissions	R111-01	ACID GASES ONLY [REG I] = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1. EMERGENCY/UPSET CONDITIONS ONLY [REG I] = Flare is used under conditions other than emergency or upset conditions. ALTERNATE OPACITY LIMITATION [REG I] = Not complying with an alternate opacity limit under 30 TAC § 111.113.
FL-6	40 CFR Part 60, Subpart A	60A-01	SUBJECT TO 40 CFR 60.18 = Flare is subject to 40 CFR § 60.18. ADHERING TO HEAT CONTENT SPECIFICATIONS = Adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4). FLARE ASSIST TYPE [NSPS A, NESHAP A, AND/OR MACT A] = Steam-assisted FLARE EXIT VELOCITY [NSPS A, NESHAP A, AND/OR MACT A] = Flare exit velocity is greater than or equal to 60 ft/s (18.3 m/sec) but less than 400 ft/s (122 m/sec). HEATING VALUE OF GAS [NSPS A, NESHAP A, AND/OR MACT A] = Heating value is less than or equal to 1000 Btu/scf (37.3 MJ/scm).
FL-6	40 CFR Part 63, Subpart A	63A-01	REQUIRED UNDER 40 CFR 63 = Flare is required by a Subpart under 40 CFR Part 63. HEAT CONTENT SPECIFICATION = Adhering to the heat content specifications in 40 CFR § 63.11(b)(6)(ii) and the maximum tip velocity specifications in 40 CFR § 63.11(b)(7) or 40 CFR § 63.11(b)(8). FLARE ASSIST TYPE = Steam assisted FLARE EXIT VELOCITY = Flare exit velocity is greater than or equal to 60 ft/s (18.3 m/sec) but less than 400 ft/s (122 m/sec). HEATING VALUE OF GAS = Heating value is less than or equal to 1000 Btu/scf (37.3 MJ/scm).
FL-8	30 TAC Chapter 111, Visible Emissions	R1111-01	ACID GASES ONLY [REG I] = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1. EMERGENCY/UPSET CONDITIONS ONLY [REG I] = Flare is used under conditions other than emergency or upset conditions. ALTERNATE OPACITY LIMITATION [REG I] = Not complying with an alternate opacity limit under 30 TAC § 111.113.

Unit ID	Regulation	Index Number	Basis of Determination*
FL-8	40 CFR Part 60, Subpart A	60A-01	SUBJECT TO 40 CFR 60.18 = Flare is subject to 40 CFR § 60.18. ADHERING TO HEAT CONTENT SPECIFICATIONS = Adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4). FLARE ASSIST TYPE [NSPS A, NESHAP A, AND/OR MACT A] = Steam-assisted FLARE EXIT VELOCITY [NSPS A, NESHAP A, AND/OR MACT A] = Flare exit velocity is less than 60 ft/s (18.3 m/sec)
FL-8	40 CFR Part 63, Subpart A	63A-01	REQUIRED UNDER 40 CFR 63 = Flare is not required by a Subpart under 40 CFR Part 63.
V-16	30 TAC Chapter 112, Sulfur Compounds	R112-01	SULFUR RECOVERY PLANT [REG II] = The gas sweetening unit is using sulfur recovery. STACK HEIGHT [REG II] = Effective stack height less than standard effective stack height.
V-5	30 TAC Chapter 112, Sulfur Compounds	R112-01	SULFUR RECOVERY PLANT [REG II] = The gas sweetening unit is using sulfur recovery. STACK HEIGHT [REG II] = Effective stack height less than standard effective stack height.
F-MSAT	40 CFR Part 63, Subpart CC	63CCVV-ALL	OWNER/OPERATOR ASSUMES HAPS FUGITIVE CONTROL REQUIREMENTS FOR ALL COMPONENTS SUBJECT TO 40 CFR Part 63, Subpart CC WITH NO ALTERNATE CONTROL OR CONTROL DEVICE
F-MSATLOAD	40 CFR Part 63, Subpart CC	63CCVV-ALL	OWNER/OPERATOR ASSUMES HAPS FUGITIVE CONTROL REQUIREMENTS FOR ALL COMPONENTS SUBJECT TO 40 CFR Part 63, Subpart CC WITH NO ALTERNATE CONTROL OR CONTROL DEVICE
FUG-CC-VV	40 CFR Part 63, Subpart CC	63CCVV-1	CLOSED VENT (OR VAPOR COLLECTION) SYSTEMS = YES COMPRESSOR IN HYDROGEN SERVICE = YES ENCLOSED COMBUSTION DEVICE = NO ENCLOSED-VENTED PROCESS UNIT AMEL = NO EXISTING SOURCE = YES FLARE = YES OPEN-ENDED VALVES OR LINES = YES PRESSURE RELIEF DEVICE IN GAS/VAPOR SERVICE = YES VACUUM SERVICE = YES VALVES IN HEAVY LIQUID SERVICE = YES VAPOR RECOVERY SYSTEM = NO CLOSED VENT (OR VAPOR COLLETION) SYSTEMS EQUIVALENT EMISSION LIMITATION = YES COMPLYING WITH TITLE 40 CFR 60 SUBPART VV = YES COMPRESSOR NOT IN HYDROGEN SERVICE = YES FLARE EQUIVALENT EMISSION LIMITATION = NO GENERAL AMEL = NO OPEN-ENDED VALVES OR LINES EQUIVALENT EMISSION LIMITATION = NO PRESSURE RELIEF DEVICE COMPLYING WITH § 60.482-4(A)-(B) = YES PUMP IN LIGHT LIQUID SERVICE = YES VALVES IN HEAVY LIQUID SERVICE EQUIVALENT EMISSION LIMITATION = NO AMEL = NO

Unit ID	Regulation	Index Number	Basis of Determination*
			COMPRESSOR EQUIVALENT EMISSION LIMITATION = NO PUMP EQUIVALENT EMISSION LIMITATION = NO CLOSED VENT (OR VAPOR COLLETION) SYSTEMS COMPLYING WITH § 60.482-10 = YES FLARE COMPLYING WITH §60.482-10 = YES OPEN-ENDED VALVES OR LINES COMPLYING WITH § 60.482-6 = YES UNITS WITHOUT AN AMEL = YES VALVES IN HEAVY LIQUID SERVICE COMPLYING WITH § 60.482-8 = YES COMPRESSOR COMPLYING WITH § 60.482-3 = YES FLANGES AND OTHER CONNECTORS = YES PUMP COMPLYING WITH § 60.482-2 = YES SAMPLING CONNECTION SYSTEMS = YES VALVES IN GAS/VAPOR OR LIGHT LIQUID SERVICE = YES FLANGES AND OTHER CONNECTORS EQUIVALENT EMISSION LIMITATION = NO PUMP IN HEAVY LIQUID SERVICE = YES SAMPLING CONNECTION SYSTEM EQUIVALENT EMISSION LIMITATION = NO VALVES IN GAS/VAPOR OR LIGHT LIQUID SERVICE EQUIVALENT EMISSION LIMITATION = NO PUMP EQUIVALENT EMISSION LIMITATION = NO FLANGES AND OTHER CONNECTORS COMPLYING WITH § 60.482-8 = YES SAMPLING CONNECTION SYSTEMS COMPLYING WITH § 60.482-5 = YES VALVES IN GAS/VAPOR OR LIGHT LIQUID SERVICE COMPLYING WITH § 60.482-7 = YES PUMP COMPLYING WITH § 60.482-8 = YES
FUG-GGGA	40 CFR Part 60, Subpart GGGa	60GGGA-01	Construction/Modification Date = Affected facility was constructed, reconstructed or modified after November 7, 2006. Equipment Components = Components are present.

Unit ID	Regulation	Index Number	Basis of Determination*
FUG-LPG	40 CFR Part 60, Subpart GGG	60GGG-1	ANY COMPRESSORS = YES CLOSED VENT (OR VAPOR COLLECTION) SYSTEMS = NO CONSTRUCTION/MODIFICATION DATE = AFTER JANUARY 4, 1983 ENCLOSED COMBUSTION DEVICE = NO EQUIPMENT IN VACUUM SERVICE = YES FLANGES AND OTHER CONNECTORS = YES FLARE = YES SAMPLING CONNECTION SYSTEMS = YES VALVES IN GAS/VAPOR OR LIGHT LIQUID SERVICE = YES VAPOR RECOVERY SYSTEM = NO AFFECTED FACILITY COVERED BY 40 CFR 60 SUBPARTS VV OR KKK = NO COMPRESSORS IN HYDROGEN SERVICE = NO COMPRESSORS IN HYDROGEN SERVICE PUMPS IN LIGHT LIQUID SERVICE = YES RECIPROCATING COMPRESSORS THAT BECAME AFFECTED FACILITY PER § 60.14 OR § 60.15 = NO COMPLYING WITH § 60.482-10 = YES COMPLYING WITH § 60.482-5 = YES COMPLYING WITH § 60.482-7 = YES COMPLYING WITH § 60.482-8 = YES COMPLYING WITH § 60.482-2 = YES OPEN-ENDED VALVES OR LINES = YES VALVES IN HEAVY LIQUID SERVICE = NO COMPLYING WITH § 60.482-3 = YES PUMPS IN HEAVY LIQUID SERVICE = NO PRESSURE RELIEF DEVICES IN GAS/VAPOR SERVICE = YES COMPLYING WITH § 60.482-6 = YES PRESSURE RELIEF DEVICES IN LIGHT LIQUID SERVICE = YES COMPLYING WITH § 60.482-8 = YES
GRP-COMP1	40 CFR Part 63, Subpart CC	63CCVV-2	CLOSED VENT (OR VAPOR COLLECTION) SYSTEMS = NO COMPRESSOR IN HYDROGEN SERVICE = YES ENCLOSED COMBUSTION DEVICE = NO ENCLOSED-VENTED PROCESS UNIT AMEL = NO EXISTING SOURCE = YES FLARE = NO OPEN-ENDED VALVES OR LINES = NO PRESSURE RELIEF DEVICE IN GAS/VAPOR SERVICE = NO VACUUM SERVICE = NO

Unit ID	Regulation	Index Number	Basis of Determination*
			VALVES IN HEAVY LIQUID SERVICE = NO VAPOR RECOVERY SYSTEM = NO CLOSED VENT (OR VAPOR COLLETION) SYSTEMS EQUIVALENT EMISSION LIMITATION = NO COMPLYING WITH TITLE 40 CFR 60 SUBPART VV = YES COMPRESSOR NOT IN HYDROGEN SERVICE = NO FLARE EQUIVALENT EMISSION LIMITATION = NO GENERAL AMEL = NO OPEN-ENDED VALVES OR LINES EQUIVALENT EMISSION LIMITATION = NO PRESSURE RELIEF DEVICE COMPLYING WITH § 60.482-4(A)-(B) = NO PUMP IN LIGHT LIQUID SERVICE = NO VALVES IN HEAVY LIQUID SERVICE EQUIVALENT EMISSION LIMITATION = NO AMEL = NO COMPRESSOR EQUIVALENT EMISSION LIMITATION = NO PUMP EQUIVALENT EMISSION LIMITATION = NO CLOSED VENT (OR VAPOR COLLETION) SYSTEMS COMPLYING WITH § 60.482-10 = NO FLARE COMPLYING WITH §60.482-10 = NO OPEN-ENDED VALVES OR LINES COMPLYING WITH § 60.482-6 = NO UNITS WITHOUT AN AMEL = YES VALVES IN HEAVY LIQUID SERVICE COMPLYING WITH § 60.482-8 = NO COMPRESSOR COMPLYING WITH § 60.482-3 = YES FLANGES AND OTHER CONNECTORS = NO PUMP COMPLYING WITH § 60.482-2 = NO SAMPLING CONNECTION SYSTEMS = NO VALVES IN GAS/VAPOR OR LIGHT LIQUID SERVICE = NO FLANGES AND OTHER CONNECTORS EQUIVALENT EMISSION LIMITATION = NO PUMP IN HEAVY LIQUID SERVICE = NO SAMPLING CONNECTION SYSTEM EQUIVALENT EMISSION LIMITATION = NO VALVES IN GAS/VAPOR OR LIGHT LIQUID SERVICE EQUIVALENT EMISSION LIMITATION = NO PUMP EQUIVALENT EMISSION LIMITATION = NO FLANGES AND OTHER CONNECTORS COMPLYING WITH § 60.482-8 = NO SAMPLING CONNECTION SYSTEMS COMPLYING WITH § 60.482-5 = NO VALVES IN GAS/VAPOR OR LIGHT LIQUID SERVICE COMPLYING WITH § 60.482-7 = NO PUMP COMPLYING WITH § 60.482-8 = NO
F-20	40 CFR Part 63, Subpart Q	63Q	USED CHROMIUM COMPOUNDS AFTER SEPT. 8 1994 (MACT Q) = The industrial process cooling tower has not used compounds containing chromium on or after September 8, 1994.

Unit ID	Regulation	Index Number	Basis of Determination*
F-21	40 CFR Part 63, Subpart Q	63Q	USED CHROMIUM COMPOUNDS AFTER SEPT. 8 1994 (MACT Q) = The industrial process cooling tower has not used compounds containing chromium on or after September 8, 1994.
WW12	40 CFR Part 61, Subpart FF	61FF-01	ALTERNATE MEANS OF COMPLIANCE = NO BY-PASS LINE = THE CLOSED VENT SYSTEM HAS NO BY-PASS LINE ALTERNATE STANDARDS FOR OIL-WATER SEPARATORS = NO CONTROL DEVICE TYPE/OPERATION = FLARE ENGINEERING CALCULATIONS = PERFORANCE TEST IS BEING USED TO DETERMINE COMPLIANCE OF A CONTROL DEVICE COVER AND CLOSED VENT = CLOSED VENT SYSTEM IS OPERATED SUCH THAT THE OIL-WATER SEPARATOR IS MAINTAINED AT NON-NEGATIVE PRESSURE (GREATER THAN ATMOSPHERIC)
WW12	40 CFR Part 63, Subpart VV	63VV-01	CONTROL [MACT VV] = No subpart of 40 CFR Parts 60, 61, or 63 references the use of 40 CFR Part 63, Subpart VV for control of emissions from the separator.
WW13	40 CFR Part 61, Subpart FF	61FF-01	ALTERNATE MEANS OF COMPLIANCE = NO BY-PASS LINE = THE CLOSED VENT SYSTEM HAS NO BY-PASS LINE ALTERNATE STANDARDS FOR OIL-WATER SEPARATORS = NO CONTROL DEVICE TYPE/OPERATION = FLARE ENGINEERING CALCULATIONS = PERFORANCE TEST IS BEING USED TO DETERMINE COMPLIANCE OF A CONTROL DEVICE COVER AND CLOSED VENT = CLOSED VENT SYSTEM IS OPERATED SUCH THAT THE OIL-WATER SEPARATOR IS MAINTAINED AT NON-NEGATIVE PRESSURE (GREATER THAN ATMOSPHERIC)
WW13	40 CFR Part 63, Subpart VV	63VV-01	CONTROL [MACT VV] = No subpart of 40 CFR Parts 60, 61, or 63 references the use of 40 CFR Part 63, Subpart VV for control of emissions from the separator.
GRP-VT-1	40 CFR Part 63, Subpart CC	63CC-01	Specified in 40 CFR § 63.640(g)(1)-(6) = The miscellaneous process vent is not part of a process specified in 40 CFR § 63.640(g)(1) - (6). Divert Vent Stream = The miscellaneous process vent utilizes a vent system that contains no by-pass lines. Subject to 40 CFR Part 63, Subparts F, G, H or I = The miscellaneous process vent is subject to 40 CFR Part 63, Subpart CC. Group 1 = The miscellaneous process vent is a Group 1 vent. Automated Data Compression Recording System = OWNER/OPERATOR DOES NOT USE AN AUTOMATED DATA COMPRESSION SYSTEM THAT RECORDS ALL VALUES THAT MEET SET CRITERIA FOR VARIATION FROM PREVIOUSLY RECORDED VALUES. Engineering Assessment = Engineering assessment is used to determine the total organic compound emission rate for the representative operating condition expected to yield the highest daily emission rate. Continuous Operating Parameter Provisions = The owner or operator does not use an alternative to the continuous operating parameter monitoring and recordkeeping provisions of 40 CFR § 63.654(i). Control Device = Flare Additional Parameter Monitoring = Parameters specified in 40 CFR § 63.644(a) are being monitored.
GRP-VT-2	40 CFR Part 63, Subpart CC	63CC-02	Specified in 40 CFR § 63.640(g)(1)-(6) = The miscellaneous process vent is not part of a process specified in 40 CFR § 63.640(g)(1) - (6). Subject to 40 CFR Part 63, Subparts F, G, H or I = The miscellaneous process vent is subject to 40 CFR Part 63, Subpart CC. Group 1 = The miscellaneous process vent is a Group 2 vent. Engineering Assessment = Engineering assessment is used to determine the total organic compound emission rate for the representative operating condition expected to yield the highest daily emission rate.

Unit ID	Regulation	Index Number	Basis of Determination*
GRP-VT-20	30 TAC Chapter 111, Visible Emissions	R1111-01	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3). Construction Date = After January 31, 1972 Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.
GRP-VT-3	40 CFR Part 63, Subpart CC	63CC-05	Specified in 40 CFR § 63.640(g)(1)-(6) = The miscellaneous process vent is not part of a process specified in 40 CFR § 63.640(g)(1) - (6). Divert Vent Stream = The miscellaneous process vent utilizes a vent system that contains no by-pass lines. Subject to 40 CFR Part 63, Subparts F, G, H or I = The miscellaneous process vent is subject to 40 CFR Part 63, Subpart CC. Group 1 = The miscellaneous process vent is a Group 1 vent. Automated Data Compression Recording System = OWNER/OPERATOR DOES NOT USE AN AUTOMATED DATA COMPRESSION SYSTEM THAT RECORDS ALL VALUES THAT MEET SET CRITERIA FOR VARIATION FROM PREVIOUSLY RECORDED VALUES. Engineering Assessment = Engineering assessment is used to determine the total organic compound emission rate for the representative operating condition expected to yield the highest daily emission rate. Continuous Operating Parameter Provisions = The owner or operator does not use an alternative to the continuous operating parameter monitoring and recordkeeping provisions of 40 CFR § 63.654(i). Control Device = Flare Additional Parameter Monitoring = Parameters specified in 40 CFR § 63.644(a) are being monitored.
GRP-VT-30	30 TAC Chapter 111, Visible Emissions	R1111-02	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3). Construction Date = On or before January 31, 1972 Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.
GRP-VT-4	40 CFR Part 63, Subpart CC	63CC-04	Specified in 40 CFR § 63.640(g)(1)-(6) = The miscellaneous process vent is not part of a process specified in 40 CFR § 63.640(g)(1) - (6). Divert Vent Stream = The miscellaneous process vent utilizes a vent system that contains no by-pass lines. Subject to 40 CFR Part 63, Subparts F, G, H or I = The miscellaneous process vent is subject to 40 CFR Part 63, Subpart CC. Group 1 = The miscellaneous process vent is a Group 1 vent. Automated Data Compression Recording System = OWNER/OPERATOR DOES NOT USE AN AUTOMATED DATA COMPRESSION SYSTEM THAT RECORDS ALL VALUES THAT MEET SET CRITERIA FOR VARIATION FROM PREVIOUSLY RECORDED VALUES. Engineering Assessment = Engineering assessment is used to determine the total organic compound emission rate for the representative operating condition expected to yield the highest daily emission rate. Continuous Operating Parameter Provisions = The owner or operator does not use an alternative to the continuous operating parameter monitoring and recordkeeping provisions of 40 CFR § 63.654(i). Control Device = Flare Additional Parameter Monitoring = Parameters specified in 40 CFR § 63.644(a) are being monitored.

Unit ID	Regulation	Index Number	Basis of Determination*
GRP-VT-5	40 CFR Part 63, Subpart CC	63CC-01	Specified in 40 CFR § 63.640(g)(1)-(6) = The miscellaneous process vent is not part of a process specified in 40 CFR § 63.640(g)(1) - (6). Divert Vent Stream = The miscellaneous process vent utilizes a vent system that contains no by-pass lines. Subject to 40 CFR Part 63, Subparts F, G, H or I = The miscellaneous process vent is subject to 40 CFR Part 63, Subpart CC. Group 1 = The miscellaneous process vent is a Group 1 vent. Automated Data Compression Recording System = OWNER/OPERATOR DOES NOT USE AN AUTOMATED DATA COMPRESSION SYSTEM THAT RECORDS ALL VALUES THAT MEET SET CRITERIA FOR VARIATION FROM PREVIOUSLY RECORDED VALUES. Engineering Assessment = Engineering assessment is used to determine the total organic compound emission rate for the representative operating condition expected to yield the highest daily emission rate. Continuous Operating Parameter Provisions = The owner or operator does not use an alternative to the continuous operating parameter monitoring and recordkeeping provisions of 40 CFR § 63.654(i). Control Device = Flare Additional Parameter Monitoring = Parameters specified in 40 CFR § 63.644(a) are being monitored.
H-41	30 TAC Chapter 111, Visible Emissions	R1111-02	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3). Construction Date = After January 31, 1972 Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.
V-20	30 TAC Chapter 111, Visible Emissions	R1111-01	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = A continuous emissions monitoring system (CEMS) capable of measuring the opacity of emissions is installed in the vent in accordance with 30 TAC § 111.111(a)(1)(C). Total Feed Capacity = Total feed capacity is greater than 20,000 barrels per day. Construction Date = After January 31, 1972 Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.
VT-11	40 CFR Part 63, Subpart CC	63CC-02	Specified in 40 CFR § 63.640(g)(1)-(6) = The miscellaneous process vent is not part of a process specified in 40 CFR § 63.640(g)(1) - (6). Subject to 40 CFR Part 63, Subparts F, G, H or I = The miscellaneous process vent is subject to 40 CFR Part 63, Subpart CC. Group 1 = The miscellaneous process vent is a Group 2 vent. Engineering Assessment = Engineering assessment is used to determine the total organic compound emission rate for the representative operating condition expected to yield the highest daily emission rate.

Unit ID	Regulation	Index Number	Basis of Determination*
VT-15	40 CFR Part 63, Subpart CC	63CC-03	Specified in 40 CFR § 63.640(g)(1)-(6) = The miscellaneous process vent is not part of a process specified in 40 CFR § 63.640(g)(1) - (6). Divert Vent Stream = The miscellaneous process vent utilizes a vent system that contains no by-pass lines. Subject to 40 CFR Part 63, Subparts F, G, H or I = The miscellaneous process vent is subject to 40 CFR Part 63, Subpart CC. Group 1 = The miscellaneous process vent is a Group 1 vent. Automated Data Compression Recording System = OWNER/OPERATOR DOES NOT USE AN AUTOMATED DATA COMPRESSION SYSTEM THAT RECORDS ALL VALUES THAT MEET SET CRITERIA FOR VARIATION FROM PREVIOUSLY RECORDED VALUES. Engineering Assessment = Engineering assessment is used to determine the total organic compound emission rate for the representative operating condition expected to yield the highest daily emission rate. Continuous Operating Parameter Provisions = The owner or operator does not use an alternative to the continuous operating parameter monitoring and recordkeeping provisions of 40 CFR § 63.654(i). Control Device = Flare Additional Parameter Monitoring = Parameters specified in 40 CFR § 63.644(a) are being monitored.
VT-15	40 CFR Part 60, Subpart NNN	60NNN-01	40 CFR 60 (NSPS) SUBPART NNN CHEMICALS = DISTILLATION UNIT PRODUCES ANY CHEMICAL LISTED IN 40 CFR § 60.667 AS A PRODUCT, CO-PRODUCT, BY-PRODUCT, OR INTERMEDIATE TOTAL RESOURCE EFFECTIVENESS (TRE) [NSPS NNN] = < OR EQUAL TO 8.0 NOT FROM HALOGENATED VENT STREAM CONSTRUCTION/MODIFICATION (RECONSTRUCTION) DATE [NSPS NNN] = AFTER DECEMBER 30, 1983 TOTAL ORGANIC COMPOUNDS (TOC) REDUCTION = COMPLIANCE IS ACHIEVED THROUGH THE USE OF A FLARE OR RECOVERY DEVICE 40 CFR 60 (NSPS) SUBPART NNN CONTROL DEVICE = FLARE VENT TYPE [NSPS NNN] = NOT DISCHARGING A VENT STREAM TO A VRS DISTILLATION UNIT TYPE (NSPS NNN) = DOES NOT QUALIFY FOR ANY EXEMPTION IN § 60.660(C)(1)-(3) TOTAL DESIGN CAPACITY [NSPS NNN] = > OR EQUAL TO 1 GGRAM/YR VENT STREAM FLOW RATE [NSPS NNN] = > OR EQUAL TO 0.008 SCM/MIN
GRP-TK13	40 CFR Part 60, Subpart UU	60 UU-01	PLANT TYPE [NSPS UU] = PETROLEUM REFINERY 40 CFR 60 (NSPS) SUBPART UU CONSTRUCTION/MODIFICATION (RECONSTRUCTION) DATE = CONSTRUCTION OR MODIFICATION WAS COMMENCED ON OR BEFORE NOVEMBER 8, 1980
GRP-TK14	40 CFR Part 60, Subpart UU	60UU-01	PLANT TYPE [NSPS UU] = PETROLEUM REFINERY 40 CFR 60 (NSPS) SUBPART UU CONSTRUCTION/MODIFICATION (RECONSTRUCTION) DATE = CONSTRUCTION OR MODIFICATION WAS COMMENCED ON OR BEFORE NOVEMBER 8, 1980

Unit ID	Regulation	Index Number	Basis of Determination*
GRP-TK15	40 CFR Part 60, Subpart UU	60UU-01	BLOWING STILL AT AFFECTED FACILITY [NSPS UU] = AFFECTED FACILITY DOES NOT CONTAIN A BLOWING STILL PLANT TYPE [NSPS UU] = PETROLEUM REFINERY STORAGE TANKS AT AFFECTED FACILITY [NSPS UU] = FACILITY CONTAINS ONE OR MORE STORAGE TANKS 40 CFR 60 (NSPS) SUBPART UU CONSTRUCTION/MODIFICATION (RECONSTRUCTION) DATE = CONSTRUCTION OR MODIFICATION WAS COMMENCED AFTER NOVEMBER 8, 1980 MATERIAL STORED [NSPS UU] = NON-ROOFING ASPHALT SATURATORS AT AFFECTED FACILITY [NSPS UU] = AFFECTED FACILITY DOES NOT CONTAIN SATURATORS STORAGE TANK EMISSIONS CONTROL [NSPS UU] = OTHER CONTROL DEVICE STORAGE TANK CONSTRUCTION/MODIFICATION (RECONSTRUCTION) DATE [NSPS UU] = AFTER MAY 26, 1981 MINERAL HANDLING/STORAGE AT AFFECTED FACILITY [NSPS UU] = FACILITIES ARE NOT PRESENT
GRP-TK3	40 CFR Part 60, Subpart UU	60UU-01	PLANT TYPE [NSPS UU] = PETROLEUM REFINERY 40 CFR 60 (NSPS) SUBPART UU CONSTRUCTION/MODIFICATION (RECONSTRUCTION) DATE = CONSTRUCTION OR MODIFICATION WAS COMMENCED ON OR BEFORE NOVEMBER 8, 1980
GRP-TK8	40 CFR Part 60, Subpart UU	60UU-01	BLOWING STILL AT AFFECTED FACILITY [NSPS UU] = AFFECTED FACILITY DOES NOT CONTAIN A BLOWING STILL PLANT TYPE [NSPS UU] = PETROLEUM REFINERY STORAGE TANKS AT AFFECTED FACILITY [NSPS UU] = FACILITY CONTAINS ONE OR MORE STORAGE TANKS 40 CFR 60 (NSPS) SUBPART UU CONSTRUCTION/MODIFICATION (RECONSTRUCTION) DATE = CONSTRUCTION OR MODIFICATION WAS COMMENCED AFTER NOVEMBER 8, 1980 MATERIAL STORED [NSPS UU] = NON-ROOFING ASPHALT SATURATORS AT AFFECTED FACILITY [NSPS UU] = AFFECTED FACILITY DOES NOT CONTAIN SATURATORS STORAGE TANK EMISSIONS CONTROL [NSPS UU] = OTHER CONTROL DEVICE STORAGE TANK CONSTRUCTION/MODIFICATION (RECONSTRUCTION) DATE [NSPS UU] = AFTER MAY 26, 1981 MINERAL HANDLING/STORAGE AT AFFECTED FACILITY [NSPS UU] = FACILITIES ARE NOT PRESENT
S-177	40 CFR Part 60, Subpart UU	60UU-01	BLOWING STILL AT AFFECTED FACILITY [NSPS UU] = AFFECTED FACILITY DOES NOT CONTAIN A BLOWING STILL PLANT TYPE [NSPS UU] = PETROLEUM REFINERY STORAGE TANKS AT AFFECTED FACILITY [NSPS UU] = FACILITY CONTAINS ONE OR MORE STORAGE TANKS 40 CFR 60 (NSPS) SUBPART UU CONSTRUCTION/MODIFICATION (RECONSTRUCTION) DATE = CONSTRUCTION OR MODIFICATION WAS COMMENCED AFTER NOVEMBER 8, 1980 MATERIAL STORED [NSPS UU] = NON-ROOFING ASPHALT SATURATORS AT AFFECTED FACILITY [NSPS UU] = AFFECTED FACILITY DOES NOT CONTAIN SATURATORS STORAGE TANK EMISSIONS CONTROL [NSPS UU] = OTHER CONTROL DEVICE STORAGE TANK CONSTRUCTION/MODIFICATION (RECONSTRUCTION) DATE [NSPS UU] = AFTER MAY 26, 1981 MINERAL HANDLING/STORAGE AT AFFECTED FACILITY [NSPS UU] = FACILITIES ARE NOT PRESENT

Unit ID	Regulation	Index Number	Basis of Determination*
S-194	40 CFR Part 60, Subpart UU	60UU-01	BLOWING STILL AT AFFECTED FACILITY [NSPS UU] = AFFECTED FACILITY DOES NOT CONTAIN A BLOWING STILL PLANT TYPE [NSPS UU] = PETROLEUM REFINERY STORAGE TANKS AT AFFECTED FACILITY [NSPS UU] = FACILITY CONTAINS ONE OR MORE STORAGE TANKS 40 CFR 60 (NSPS) SUBPART UU CONSTRUCTION/MODIFICATION (RECONSTRUCTION) DATE = CONSTRUCTION OR MODIFICATION WAS COMMENCED AFTER NOVEMBER 8, 1980 MATERIAL STORED [NSPS UU] = NON-ROOFING ASPHALT SATURATORS AT AFFECTED FACILITY [NSPS UU] = AFFECTED FACILITY DOES NOT CONTAIN SATURATORS STORAGE TANK EMISSIONS CONTROL [NSPS UU] = OTHER CONTROL DEVICE STORAGE TANK CONSTRUCTION/MODIFICATION (RECONSTRUCTION) DATE [NSPS UU] = AFTER MAY 26, 1981 MINERAL HANDLING/STORAGE AT AFFECTED FACILITY [NSPS UU] = FACILITIES ARE NOT PRESENT
PROACID1	30 TAC Chapter 112, Sulfur Compounds	R112-01	30 TAC (NSPS) SUBPART V FACILITY TYPE = ANY OTHER TYPE OF SULFURIC ACID PLANT THAT DOES NOT USE CONTACT PROCESS EFFECTIVE STACK HEIGHT [REG II] = EFFECTIVE STACK HEIGHT IS LESS THAN STANDARD EFFECTIVE STACK HEIGHT PRODUCTION CAPACITY [REG II] = PRODUCTION CAPACITY LESS THAN OR EQUAL TO 300 TONS PER DAY (EXPESSED AS 100% ACID)
PROACID1	40 CFR Part 60, Subpart H	60H-01	40 CFR 60 (NSPS) SUBPART H CONSTRUCTION/MODIFICATION (RECONSTRUCTION) DATE = AFTER AUGUST 17 1971 PROCESS DESIGN [NSPS H] = SOURCE DOES NOT PROCESS ELEMENTAL SULFUR OR AN ORE THAT CONTAINS ELEMENTAL SULFUR AND USE AIR TO SUPPLY OXYGE
PROACID2	30 TAC Chapter 112, Sulfur Compounds	R112-01	30 TAC (NSPS) SUBPART V FACILITY TYPE = ANY OTHER TYPE OF SULFURIC ACID PLANT THAT DOES NOT USE CONTACT PROCESS EFFECTIVE STACK HEIGHT [REG II] = EFFECTIVE STACK HEIGHT IS LESS THAN STANDARD EFFECTIVE STACK HEIGHT PRODUCTION CAPACITY [REG II] = PRODUCTION CAPACITY LESS THAN OR EQUAL TO 300 TONS PER DAY (EXPESSED AS 100% ACID)
PROACID2	40 CFR Part 60, Subpart H	60H-01	40 CFR 60 (NSPS) SUBPART H CONSTRUCTION/MODIFICATION (RECONSTRUCTION) DATE = AFTER AUGUST 17 1971 PROCESS DESIGN [NSPS H] = SOURCE DOES NOT PROCESS ELEMENTAL SULFUR OR AN ORE THAT CONTAINS ELEMENTAL SULFUR AND USE AIR TO SUPPLY OXYGE
B-12	40 CFR Part 60, Subpart J	60J-01	FACILITY TYPE = Fuel gas combustion device, other than a flare, that does NOT meet requirements in §§ 60.105(a)(4)(iv) or 60.105(b) MONITORING DEVICE = An instrument is in place for continuously monitoring and recording the concentration (dry basis) of hydrogen sulfide in fuel gases before being burned in any fuel gas combustion device. CONSTRUCTION/MODIFICATION DATE = After June 11, 1973 and on or before May 14, 2007
B-13	40 CFR Part 60, Subpart J	60J-01	FACILITY TYPE = Fuel gas combustion device, other than a flare, that does NOT meet requirements in §§ 60.105(a)(4)(iv) or 60.105(b) MONITORING DEVICE = An instrument is in place for continuously monitoring and recording the concentration (dry basis) of hydrogen sulfide in fuel gases before being burned in any fuel gas combustion device. CONSTRUCTION/MODIFICATION DATE = After June 11, 1973 and on or before May 14, 2007
B-22	40 CFR Part 60, Subpart Ja	60Ja-02	FACILITY TYPE = Fuel gas combustion device, other than a flare or process heater, that does NOT meet requirements in § 60.107a(a)(3)(i)-(iv). CONSTRUCTION/MODIFICATION DATE = After June 24, 2008 SO2 EMISSION LIMIT = Owner or operator is choosing SO_2 limit in terms of ppmv H_2S in fuel gas.
FL-1	40 CFR Part 60, Subpart J	60J-01	FACILITY TYPE = Flare that is used for fuel gas combustion located at a petroleum refinery CONSTRUCTION/MODIFICATION DATE = After June 24, 2008

Unit ID	Regulation	Index Number	Basis of Determination*
FL-1	40 CFR Part 60, Subpart Ja	60Ja-1	FACILITY TYPE = Flare that is used for fuel gas combustion that does NOT meet requirements in § 60.107a(a)(3). CONSTRUCTION/MODIFICATION DATE = After June 24, 2008 SO2 EMISSION LIMIT = Owner or operator is choosing SO_2 limit in terms of ppmv H_2S in fuel gas.
FL-3	40 CFR Part 60, Subpart J	60J-01	FACILITY TYPE = Flare that is used for fuel gas combustion located at a petroleum refinery CONSTRUCTION/MODIFICATION DATE = After June 24, 2008
FL-3	40 CFR Part 60, Subpart Ja	60Ja-1	FACILITY TYPE = Flare that is used for fuel gas combustion that does NOT meet requirements in § 60.107a(a)(3). CONSTRUCTION/MODIFICATION DATE = After June 24, 2008 SO2 EMISSION LIMIT = Owner or operator is choosing SO_2 limit in terms of ppmv H_2S in fuel gas.
FL-4	40 CFR Part 60, Subpart J	60J-01	FACILITY TYPE = Flare that is used for fuel gas combustion located at a petroleum refinery CONSTRUCTION/MODIFICATION DATE = After June 24, 2008
FL-4	40 CFR Part 60, Subpart Ja	60Ja-1	FACILITY TYPE = Flare that is used for fuel gas combustion that does NOT meet requirements in § 60.107a(a)(3). CONSTRUCTION/MODIFICATION DATE = After June 24, 2008 SO2 EMISSION LIMIT = Owner or operator is choosing SO_2 limit in terms of ppmv H_2S in fuel gas.
FL-6	40 CFR Part 60, Subpart J	60J-01	FACILITY TYPE = Flare that is used for fuel gas combustion located at a petroleum refinery MONITORING DEVICE = An instrument is in place for continuously monitoring and recording the concentration (dry basis) of hydrogen sulfide in fuel gases before being burned in any fuel gas combustion device. CONSTRUCTION/MODIFICATION DATE = After June 24, 2008
FL-6	40 CFR Part 60, Subpart Ja	60Ja-1	FACILITY TYPE = Flare that is used for fuel gas combustion that does NOT meet requirements in § 60.107a(a)(3). CONSTRUCTION/MODIFICATION DATE = After June 24, 2008 SO2 EMISSION LIMIT = Owner or operator is choosing SO_2 limit in terms of ppmv H_2S in fuel gas.
FL-7	40 CFR Part 60, Subpart J	60J-01	FACILITY TYPE = Fuel gas combustion device, other than a flare, that does NOT meet requirements in §§ 60.105(a)(4)(iv) or 60.105(b) MONITORING DEVICE = An instrument is in place for continuously monitoring and recording the concentration (dry basis) of hydrogen sulfide in fuel gases before being burned in any fuel gas combustion device. CONSTRUCTION/MODIFICATION DATE = After June 24, 2008
FL-7	40 CFR Part 60, Subpart Ja	60Ja-1	FACILITY TYPE = Fuel gas combustion device, other than a flare or process heater, that does NOT meet requirements in § 60.107a(a)(3)(i)-(iv). CONSTRUCTION/MODIFICATION DATE = After June 24, 2008 SO2 EMISSION LIMIT = Owner or operator is choosing SO_2 limit in terms of ppmv H_2S in fuel gas.
FL-8	40 CFR Part 60, Subpart J	60J-01	FACILITY TYPE = Flare that is used for fuel gas combustion located at a petroleum refinery CONSTRUCTION/MODIFICATION DATE = After June 24, 2008
FL-8	40 CFR Part 60, Subpart Ja	60Ja-1	FACILITY TYPE = Flare that is used for fuel gas combustion that does NOT meet requirements in § 60.107a(a)(3). CONSTRUCTION/MODIFICATION DATE = After June 24, 2008 SO2 EMISSION LIMIT = Owner or operator is choosing SO_2 limit in terms of ppmv H_2S in fuel gas.
GRP-BOILER1	40 CFR Part 60, Subpart J	60J-01	FACILITY TYPE = Fuel gas combustion device, other than a flare, that does NOT meet requirements in §§ 60.105(a)(4)(iv) or 60.105(b) CONSTRUCTION/MODIFICATION DATE = On or before June 11, 1973

Unit ID	Regulation	Index Number	Basis of Determination*
GRP-BOILER2	40 CFR Part 60, Subpart J	60J-01	FACILITY TYPE = Fuel gas combustion device, other than a flare, that does NOT meet requirements in §§ 60.105(a)(4)(iv) or 60.105(b) CONSTRUCTION/MODIFICATION DATE = On or before June 11, 1973
GRP-HTR-FG	40 CFR Part 60, Subpart J	60J-01	FACILITY TYPE = Fuel gas combustion device, other than a flare, that does NOT meet requirements in §§ 60.105(a)(4)(iv) or 60.105(b) MONITORING DEVICE = An instrument is in place for continuously monitoring and recording the concentration (dry basis) of hydrogen sulfide in fuel gases before being burned in any fuel gas combustion device. CONSTRUCTION/MODIFICATION DATE = After June 11, 1973 and on or before May 14, 2007
GRP-HTR-FG2	40 CFR Part 60, Subpart J	60J-01	FACILITY TYPE = Fuel gas combustion device, other than a flare, that does NOT meet requirements in §§ 60.105(a)(4)(iv) or 60.105(b) CONSTRUCTION/MODIFICATION DATE = On or before June 11, 1973
H-2	40 CFR Part 60, Subpart J	60J-01	FACILITY TYPE = Fuel gas combustion device, other than a flare, that does NOT meet requirements in §§ 60.105(a)(4)(iv) or 60.105(b) MONITORING DEVICE = An instrument is in place for continuously monitoring and recording the concentration (dry basis) of hydrogen sulfide in fuel gases before being burned in any fuel gas combustion device. CONSTRUCTION/MODIFICATION DATE = After June 11, 1973 and on or before May 14, 2007
H-2	40 CFR Part 60, Subpart Ja	60Ja-02	FACILITY TYPE = Process heater that is used for fuel gas that does NOT meet requirements in § 60.107a(a)(3). HEATER CAPACITY = The process heater is rated greater than 40 MMBtu/hr but less than 100 MMBtu/hr. LOW-NOX = The process heater has low-NO_x or ultra low-NO_x burners. CONSTRUCTION/MODIFICATION DATE = After June 24, 2008 SO2 EMISSION LIMIT = Owner or operator is choosing SO_2 limit in terms of ppmv H_2S in fuel gas.
H-41	40 CFR Part 60, Subpart J	60J-01	FACILITY TYPE = Fuel gas combustion device, other than a flare, that does NOT meet requirements in §§ 60.105(a)(4)(iv) or 60.105(b) MONITORING DEVICE = An instrument is in place for continuously monitoring and recording the concentration (dry basis) of hydrogen sulfide in fuel gases before being burned in any fuel gas combustion device. CONSTRUCTION/MODIFICATION DATE = After June 11, 1973 and on or before May 14, 2007
V-16	40 CFR Part 60, Subpart J	60J-01	FACILITY TYPE = Claus sulfur recovery plant greater than 20 long tons per day CONSTRUCTION/MODIFICATION DATE = After October 4, 1976 and on or before May 14, 2007 CONTROL SYSTEM = The Claus sulfur recovery plant has an oxidation control system or a reduction control system followed by incineration. CONTROL MONITORING SYSTEM = The control monitoring system has an instrument using an air or oxygen dilution and oxidation system to convert the reduced sulfur to sulfur dioxide for continuously monitoring and recording the concentration of the resultant SO_2.
V-16	40 CFR Part 60, Subpart Ja	60Ja-01	FACILITY TYPE = Sulfur recovery plant greater than 20 long tons per day. SRP SO2 CONTROL = Plant utilizes an oxidation control, or a reduction control system followed by incineration.
V-16	40 CFR Part 63, Subpart UUU	63UUU-006	SRU Emission Limitation = Claus SRU part of sulfur recovery plant greater than or equal to 20 long tons/day using oxidation or reduction system followed by incineration subject to 250 ppmv SO_2 emission limit in §60.104(a)(2). SRU Bypass Line = No bypass line serving the SRU.

Unit ID	Regulation	Index Number	Basis of Determination*
V-18	40 CFR Part 63, Subpart UUU	63UUU-003	CRU HCl Emission Limitation = Existing cyclic or continuous CRU reducing uncontrolled emissions of HCl by 97% by weight or to a concentration of 10 ppmv. CRU TOC Emission Limitation = Vent emissions of TOC to a flare (Option 1). CRU HCl Control Device = Wet Scrubber. CRU TOC Compliance Method = Complying with the TOC percent reduction limit. CRU TOC Control Device = Control device, other than a flare, thermal incinerator, process heater or boiler, approved under §63.1573(d). Wet/Internal Scrubber Alt Monitoring = No alternate monitoring. CRU Engineering Assessment = Demonstrating compliance by performance test. Wet Scrubber Alt Gas Flow Rate = Using the alternative procedure to determine the gas flow rate in §63.1573(a)(1). CRU Alternate Monitoring = No alternate monitoring. CRU Bypass Line = Use a manual lock system by installing a car-seal or lock-and-key device.
V-18	40 CFR Part 63, Subpart UUU	63UUU-004	CRU HCl Emission Limitation = Existing cyclic or continuous CRU reducing uncontrolled emissions of HCl by 97% by weight or to a concentration of 10 ppmv. CRU TOC Emission Limitation = Reduce uncontrolled emissions of TOC or nonmethane TOC by 98% by weight or to a concentration of 20 ppmv (Option 2). CRU HCl Control Device = Wet Scrubber. CRU TOC Compliance Method = Complying with the TOC percent reduction limit. CRU TOC Control Device = Process Heater with a design heat input capacity < 44 MW or in which all vent streams not introduced into the flame zone. Wet/Internal Scrubber Alt Monitoring = No alternate monitoring. CRU Engineering Assessment = Choosing to perform an engineering assessment for CRUs according to the requirements of §63.1571(c). Wet Scrubber Alt Gas Flow Rate = Using the alternative procedure to determine the gas flow rate in §63.1573(a)(1). CRU Alternate Monitoring = No alternate monitoring. CRU Bypass Line = Use a manual lock system by installing a car-seal or lock-and-key device.
V-20	40 CFR Part 60, Subpart J	60J-01	FACILITY TYPE = FCCU catalyst regenerator located at a petroleum refinery CONSTRUCTION/MODIFICATION DATE = After June 11, 1973 and on or before January 17, 1984 DISCHARGED GASES = Gases discharged by the FCCU catalyst regenerator do not pass through an incinerator or waste heat boiler in which auxiliary or supplemental liquid or solid fossil fuel is burned. CONTACT MATERIAL = The FCCU catalyst regenerator does not have contact material that reacts with petroleum derivatives to improve feedstock quality in which the contact material is regenerated by burning off coke and/or other deposits.

Unit ID	Regulation	Index Number	Basis of Determination*
V-20	40 CFR Part 63, Subpart UUU	63UUU-001	CCU CO Emission Limitation = CCU subject to the NSPS for CO in 40 CFR § 60.103 or electing to comply with the NSPS requirements (Option 1). CCU PM/Opacity Emission Limitation = CCU subject to the NSPS for PM in 40 CFR §60.102 - PM emissions not to exceed 1.0 kg/1,000 kg of coke burn-off in the catalyst regenerator and opacity of emissions not to exceed 30%, except for one 6-minute avg. opacity reading in any 1-hour period. CCU PM Control Device = Electrostatic Precipitator serving CCU over 20,000 barrels/day fresh feed capacity. CCU CO Monitoring Method = Using CEMS to demonstrate CO emission average under 50 ppm (dry basis). CCU PM Monitoring Method = Continuous Opacity Monitoring System. CCU Bypass Line = No bypass line serving the catalytic cracking unit. Alternate Method for Measuring Gas Flow Rate = Not using an alternate method for measuring gas flow rate as listed in §63.1573(a)(1). Multiple CCUs Served by a Single Wet Scrubber = Each CCU is served by a single wet scrubber.
V-20	40 CFR Part 63, Subpart UUU	63UUU-002	CCU CO Emission Limitation = CCU subject to the NSPS for CO in 40 CFR § 60.103 or electing to comply with the NSPS requirements (Option 1). CCU PM/Opacity Emission Limitation = CCU subject to the NSPS for PM in 40 CFR §60.102 - PM emissions not to exceed 1.0 kg/1,000 kg of coke burn-off in the catalyst regenerator and opacity of emissions not to exceed 30%, except for one 6-minute avg. opacity reading in any 1-hour period. CCU PM Control Device = Electrostatic Precipitator serving CCU over 20,000 barrels/day fresh feed capacity. CCU CO Monitoring Method = Using CEMS to demonstrate CO emission average under 50 ppm (dry basis). CCU PM Monitoring Method = Continuous Opacity Monitoring System. CCU Bypass Line = No bypass line serving the catalytic cracking unit. Alternate Method for Measuring Gas Flow Rate = Not using an alternate method for measuring gas flow rate as listed in §63.1573(a)(1). Multiple CCUs Served by a Single Wet Scrubber = Each CCU is served by a single wet scrubber.
V-21	40 CFR Part 63, Subpart UUU	63UUU-003	CRU HCl Emission Limitation = Existing semi-regenerative CRU reducing uncontrolled emissions of HCl 92% by weight or to a concentration of 30 ppmv. CRU TOC Emission Limitation = Vent emissions of TOC to a flare (Option 1). CRU HCl Control Device = Internal Scrubbing System meeting the HCl outlet concentration limit. CRU TOC Compliance Method = Complying with the TOC percent reduction limit. CRU TOC Control Device = Control device, other than a flare, thermal incinerator, process heater or boiler, approved under §63.1573(d). CRU Engineering Assessment = Demonstrating compliance by performance test. CRU Alternate Monitoring = No alternate monitoring. CRU Bypass Line = No bypass line serving the SRU.
V-21	40 CFR Part 63, Subpart UUU	63UUU-004a	CRU HCl Emission Limitation = Existing semi-regenerative CRU reducing uncontrolled emissions of HCl 92% by weight or to a concentration of 30 ppmv. CRU TOC Emission Limitation = Vent emissions of TOC to a flare (Option 1). CRU HCl Control Device = Internal Scrubbing System meeting the HCl outlet concentration limit. CRU TOC Compliance Method = Complying with the TOC percent reduction limit. CRU TOC Control Device = Control device, other than a flare, thermal incinerator, process heater or boiler, approved under §63.1573(d). CRU Engineering Assessment = Demonstrating compliance by performance test. CRU Alternate Monitoring = No alternate monitoring. CRU Bypass Line = No bypass line serving the SRU.

Unit ID	Regulation	Index Number	Basis of Determination*
V-5	40 CFR Part 60, Subpart J	60J-01	FACILITY TYPE = Claus sulfur recovery plant greater than 20 long tons per day CONSTRUCTION/MODIFICATION DATE = After October 4, 1976 and on or before May 14, 2007 CONTROL SYSTEM = The Claus sulfur recovery plant has an oxidation control system or a reduction control system followed by incineration. CONTROL MONITORING SYSTEM = The control monitoring system has an instrument using an air or oxygen dilution and oxidation system to convert the reduced sulfur to sulfur dioxide for continuously monitoring and recording the concentration of the resultant SO_2.
V-5	40 CFR Part 60, Subpart Ja	60Ja-01	FACILITY TYPE = Sulfur recovery plant greater than 20 long tons per day. SRP SO2 CONTROL = Plant utilizes an oxidation control, or a reduction control system followed by incineration.
V-5	40 CFR Part 63, Subpart UUU	63UUU-005a	SRU Emission Limitation = SRU using oxidation or reduction control system followed by incineration not subject to NSPS SO_2 emission limit in §60.104(a)(2) electing to comply with NSPS requirements of 250 ppmv. SRU Bypass Line = No bypass line serving the SRU.
FL-1	40 CFR Part 61, Subpart FF	61FF-01	Unit Type = Individual drain system By-pass Line = System does not contain by-pass lines Control Device Type/Operation = Flare. Engineering Calculations = Performance tests are used to demonstrate the control device achieves compliance.
FL-3	40 CFR Part 61, Subpart FF	61FF-01	Unit Type = Container By-pass Line = System does not contain by-pass lines Control Device Type/Operation = Flare. Engineering Calculations = Performance tests are used to demonstrate the control device achieves compliance.
FL-4	40 CFR Part 61, Subpart FF	61FF-01	Unit Type = Individual drain system By-pass Line = System does not contain by-pass lines Control Device Type/Operation = Flare. Engineering Calculations = Performance tests are used to demonstrate the control device achieves compliance.
FL-6	40 CFR Part 61, Subpart FF	61FF-01	Unit Type = Individual drain system By-pass Line = System does not contain by-pass lines Control Device Type/Operation = Flare. Engineering Calculations = Performance tests are used to demonstrate the control device achieves compliance.
FL-8	40 CFR Part 61, Subpart FF	61FF-01	Unit Type = Individual drain system By-pass Line = System does not contain by-pass lines Control Device Type/Operation = Flare. Engineering Calculations = Performance tests are used to demonstrate the control device achieves compliance.
GRP-CAS	40 CFR Part 61, Subpart FF	61FF-02	Unit Type = Individual drain system By-pass Line = System does not contain by-pass lines Control Device Type/Operation = Carbon adsorption system that does not regenerate the carbon bed directly in the control device. Engineering Calculations = Engineering calculations show that the control device is proven to achieve its emission limitation. Carbon Replacement Interval = Carbon adsorber is monitored and carbon replaced on indication of breakthrough.

Unit ID	Regulation	Index Number	Basis of Determination*
PROFFTRMT	40 CFR Part 61, Subpart FF	61FF-01	AMOC = An alternate means of compliance (AMOC) to meet the requirements of 40 CFR § 61.348 for treatment processes is not used. Complying with § 61.342(e) = The facility is not complying with 40 CFR § 61.342(e). Openings = The treatment process or wastewater treatment system unit has openings. Stream Combination = The process wastewater, product tank drawdown, or landfill leachate is not combined with other waste streams for the purpose of facilitating management or treatment in the wastewater treatment system. Benzene Removal = Benzene is removed from the waste stream to a level of less than 10 ppmw on a flow weighted annual average basis. Less Than Atmospheric = A cover and closed-vent system are operated such that the treatment process or wastewater system unit is maintained at ambient atmospheric pressure. Closed-Vent System and Control Device = A closed-vent system and control device is not used. Process Or Stream Exemption = The treatment process or waste stream is complying with 40 CFR §61.348(d).

* - The “unit attributes” or operating conditions that determine what requirements apply

NSR Versus Title V FOP

The state of Texas has two Air permitting programs, New Source Review (NSR) and Title V Federal Operating Permits. The two programs are substantially different both in intent and permit content.

NSR is a preconstruction permitting program authorized by the Texas Clean Air Act and Title I of the Federal Clean Air Act (FCAA). The processing of these permits is governed by 30 Texas Administrative Code (TAC) Chapter 116.111. The Title V Federal Operating Program is a federal program authorized under Title V of the FCAA that has been delegated to the state of Texas to administer and is governed by 30 TAC Chapter 122. The major differences between the two permitting programs are listed in the table below:

NSR Permit	Federal Operating Permit(FOP)
Issued Prior to new Construction or modification of an existing facility	For initial permit with application shield, can be issued after operation commences; significant revisions require approval prior to operation.
Authorizes air emissions	Codifies existing applicable requirements, does not authorize new emissions
Ensures issued permits are protective of the environment and human health by conducting a health effects review and that requirement for best available control technology (BACT) is implemented.	Applicable requirements listed in permit are used by the inspectors to ensure proper operation of the site as authorized. Ensures that adequate monitoring is in place to allow compliance determination with the FOP.
Up to two Public notices may be required. Opportunity for public comment and contested case hearings for some authorizations.	One public notice required. Opportunity for public comments. No contested case hearings.
Applies to all point source emissions in the state.	Applies to all major sources and some non-major sources identified by the EPA.
Applies to facilities: a portion of site or individual emission sources	One or multiple FOPs cover the entire site (consists of multiple facilities)
Permits include terms and conditions under which the applicant must construct and operate its various equipment and processes on a facility basis.	Permits include terms and conditions that specify the general operational requirements of the site; and also include codification of all applicable requirements for emission units at the site.
Opportunity for EPA review for Federal Prevention of Significant Deterioration (PSD) and Nonattainment (NA) permits for major sources.	Opportunity for EPA review, Affected states review, and a Public petition period for every FOP.
Permits have a table listing maximum emission limits for pollutants	Permit has an applicable requirements table and Periodic Monitoring (PM) / Compliance Assurance Monitoring (CAM) tables which document applicable monitoring requirements.
Permits can be altered or amended upon application by company. Permits must be issued before construction or modification of facilities can begin.	Permits can be revised through several revision processes, which provide for different levels of public notice and opportunity to comment. Changes that would be significant revisions require that a revised permit be issued before those changes can be operated.
NSR permits are issued independent of FOP requirements.	FOP are independent of NSR permits, but contain a list of all NSR permits incorporated by reference

New Source Review Requirements

Below is a list of the New Source Review (NSR) permits for the permitted area. These NSR permits are incorporated by reference into the operating permit and are enforceable under it. These permits can be found in the main TCEQ file room, located on the first floor of Building E, 12100 Park 35 Circle, Austin, Texas. The Public Education Program may be contacted at 1-800-687-4040 or the Air Permits Division (APD) may be contacted at 1-512-239-1250 for help with any question.

Additionally, the site contains emission units that are permitted by rule under the requirements of 30 TAC Chapter 106, Permits by Rule. The following table specifies the permits by rule that apply to the site. All current permits by rule are contained in Chapter 106. Outdated 30 TAC Chapter 106 permits by rule may be viewed at the following Web site:

www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/old106list/index106.html

Outdated Standard Exemption lists may be viewed at the following Web site:

www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/oldselist/se_index.html

Prevention of Significant Deterioration (PSD) Permits	
PSD Permit No.: PSDTX861M3	Issuance Date: 12/20/2013
Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.	
Authorization No.: 100135	Issuance Date: 01/26/2012
Authorization No.: 9708	Issuance Date: 12/20/2013
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.142	Version No./Date: 12/24/1998
Number: 106.144	Version No./Date: 09/04/2000
Number: 106.183	Version No./Date: 09/04/2000
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.262	Version No./Date: 11/01/2003
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.264	Version No./Date: 09/04/2000
Number: 106.452	Version No./Date: 09/04/2000
Number: 106.472	Version No./Date: 09/04/2000
Number: 106.473	Version No./Date: 09/04/2000
Number: 106.476	Version No./Date: 09/04/2000
Number: 106.478	Version No./Date: 09/04/2000
Number: 106.492	Version No./Date: 09/04/2000
Number: 106.511	Version No./Date: 09/04/2000
Number: 106.512	Version No./Date: 06/13/2001

Number: 106.533	Version No./Date: 07/04/2004
Number: 7	Version No./Date: 08/30/1988

Emission Units and Emission Points

In air permitting terminology, any source capable of generating emissions (for example, an engine or a sandblasting area) is called an Emission Unit. For purposes of Title V, emission units are specifically listed in the operating permit when they have applicable requirements other than New Source Review (NSR), or when they are listed in the permit shield table.

The actual physical location where the emissions enter the atmosphere (for example, an engine stack or a sand-blasting yard) is called an emission point. For New Source Review preconstruction permitting purposes, every emission unit has an associated emission point. Emission limits are listed in an NSR permit, associated with an emission point. This list of emission points and emission limits per pollutant is commonly referred to as the "Maximum Allowable Emission Rate Table", or "MAERT" for short. Specifically, the MAERT lists the Emission Point Number (EPN) that identifies the emission point, followed immediately by the Source Name, identifying the emission unit that is the source of those emissions on this table.

Thus, by reference, an emission unit in a Title V operating permit is linked by reference number to an NSR authorization, and its related emission point.

Monitoring Sufficiency

Federal and state rules, 40 CFR § 70.6(a)(3)(i)(B) and 30 TAC § 122.142(c) respectively, require that each federal operating permit include additional monitoring for applicable requirements that lack periodic or instrumental monitoring (which may include recordkeeping that serves as monitoring) that yields reliable data from a relevant time period that are representative of the emission unit's compliance with the applicable emission limitation or standard. Furthermore, the federal operating permit must include compliance assurance monitoring (CAM) requirements for emission sources that meet the applicability criteria of 40 CFR Part 64 in accordance with 40 CFR § 70.6(a)(3)(i)(A) and 30 TAC § 122.604(b).

With the exception of any emission units listed in the Periodic Monitoring or CAM Summaries in the FOP, the TCEQ Executive Director has determined that the permit contains sufficient monitoring, testing, recordkeeping, and reporting requirements that assure compliance with the applicable requirements. If applicable, each emission unit that requires additional monitoring in the form of periodic monitoring or CAM is described in further detail under the Rationale for CAM/PM Methods Selected section following this paragraph.

Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected

Periodic Monitoring:

The Federal Clean Air Act requires that each federal operating permit include monitoring sufficient to assure compliance with the terms and conditions of the permit. Most of the emission limits and standards applicable to emission units at Title V sources include adequate monitoring to show that the units meet the limits and standards. For those requirements that do not include monitoring, or where the monitoring is not sufficient to assure compliance, the federal operating permit must include such monitoring for the emission units affected. The following emission units are subject to periodic monitoring requirements because the emission units are subject to an emission limitation or standard for an air pollutant (or surrogate thereof) in an applicable requirement that does not already require monitoring, or the monitoring for the applicable requirement is not sufficient to assure compliance:

Unit/Group/Process Information	
ID No.: GRP-TK8, GRP-TK15, S-177, S-194	
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart UU	SOP Index No.: 60UU-01
Pollutant: PM (OPACITY)	Main Standard: § 60.472(c)
Monitoring Information	
Indicator: Opacity	
Minimum Frequency: once per month	
Averaging Period: six minutes	
Deviation Limit: < 0% Opacity, except for one consecutive 15-minute period in any 24-hour period when the transfer lines are being blown for clearing.	
Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.	

Unit/Group/Process Information	
ID No.: GRP-VT-20	
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-01
Pollutant: OPACITY	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per calendar quarter	
Averaging Period: n/a	
Deviation Limit: Opacity above 20%	
Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations. The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.	

Unit/Group/Process Information	
ID No.: GRP-VT-30	
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-02
Pollutant: OPACITY	Main Standard: § 111.111(a)(1)(A)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per quarter	
Averaging Period: n/a	
Deviation Limit: Opacity above 30%	
Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.	

Unit/Group/Process Information	
ID No.: H-41	
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-02
Pollutant: OPACITY	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Opacity	
Minimum Frequency: Once per month	
Averaging Period: Six-minutes	
Deviation Limit: Opacity > 15 percent	
Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.	

Compliance Assurance Monitoring (CAM):

Compliance Assurance Monitoring (CAM) is a federal monitoring program established under Title 40 Code of Federal Regulations Part 64 (40 CFR Part 64).

Emission units are subject to CAM requirements if they meet the following criteria:

1. the emission unit is subject to an emission limitation or standard for an air pollutant (or surrogate thereof) in an applicable requirement;

2. the emission unit uses a control device to achieve compliance with the emission limitation or standard specified in the applicable requirement; and

3. the emission unit has the pre-control device potential to emit greater than or equal to the amount in tons per year for a site to be classified as a major source.

The following table(s) identify the emission unit(s) that are subject to CAM:

Unit/Group/Process Information	
ID No.: FL-1, FL-3, FL-4, FL-6, FL-8	
Control Device ID No.: FL-1, FL-3, FL-4, FL-6, FL-8	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 40 CFR Part 61, Subpart FF	SOP Index No.: 61FF-01
Pollutant: BENZENE	Main Standard: § 61.349(a)
Monitoring Information	
Indicator: Pilot Flame	
Minimum Frequency: Continuous	
Averaging Period: n/a	
Deviation Limit: It is a deviation if there is no pilot flame	
Basis of CAM: It is widely practiced and accepted to monitor the flare pilot flame by closed circuit cameras, thermocouples and visual inspection. The presence of the pilot flame demonstrates that VOC emissions are combusted. Monitoring the presence of a pilot flame is required in many federal rules, including: 40 CFR Part 60, Subparts K, III, NNN, QQQ, and RRR; 40 CFR Part 61, Subparts BB and FF; and 40 CFR Part 63, Subparts G, R, W, DD, and HH.	

Unit/Group/Process Information	
ID No.: PROACID2	
Control Device ID No.: V-29SCBR	Control Device Type: SO2 Scrubber
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 112, Sulfur Compounds	SOP Index No.: R112-01
Pollutant: SO2	Main Standard: § 112.6(a)
Monitoring Information	
Indicator: Sulfur Dioxide Concentration	
Minimum Frequency: four times per hour	
Averaging Period: one hour	
Deviation Limit: SO2 emissions may not exceed 189.77 lb/hr, based on the equation in 30 TAC 112.6. (Stack Effluent Flow Rate, q=5469 scfm)	
Basis of CAM: It is widely practiced and accepted to calibrate and use a portable analyzer or CEMS to measure SO2 concentration with procedures such as EPA Test Method 6C. The measured concentration along with stack flow rate or AP-42 factors and fuel consumption records may be used to demonstrate compliance with an underlying emission limit or standard.	

Unit/Group/Process Information	
ID No.: PROACID2	
Control Device ID No.: V-29SCBR	Control Device Type: SO2 Scrubber
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart H	SOP Index No.: 60H-01
Pollutant: SO2	Main Standard: § 60.82(a)
Monitoring Information	
Indicator: Sulfur Dioxide Concentration	
Minimum Frequency: four times per hour	
Averaging Period: one hour	
Deviation Limit: It is a deviation if SO2 emissions exceed 2 kg per metric ton of acid produced (4 lbs per ton).	
Basis of CAM: It is widely practiced and accepted to calibrate and use a portable analyzer or CEMS to measure SO2 concentration with procedures such as EPA Test Method 6C. The measured concentration along with stack flow rate or AP-42 factors and fuel consumption records may be used to demonstrate compliance with an underlying emission limit or standard.	

Unit/Group/Process Information	
ID No.: V-5	
Control Device ID No.: V-5INC	Control Device Type: Sulfur Recovery Unit with Incinerator
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 112, Sulfur Compounds	SOP Index No.: R112-01
Pollutant: SO2	Main Standard: § 112.7(a)
Monitoring Information	
Indicator: SO2 Mass Emissions in Pounds per Hour	
Minimum Frequency: four times per hour	
Averaging Period: one hour	
Deviation Limit: SO2 emissions may not exceed 580.11 lb/hr, based on the equation in 30 TAC 112.7. (Stack Effluent Flow Rate, q=5009 scfm)	
Basis of CAM: A common way to determine if a sulfur recovery unit (SRU) is operating correctly is to operate the thermal incinerator above a minimal combustion temperature based on performance tests, manufacturer's recommendations, engineering calculations and/or historical data. The monitoring of combustion temperature of a thermal incinerator used to oxidize sulfur compounds is required in 40 CFR Part 60, Subparts BB (Standards of Performance for Kraft Pulp Mills) and LLL (Standards of Performance for Onshore Natural Gas Processing: SO2 Emissions). Additionally, this option requires the monitoring of the SO2 mass emission rate since an increase in SO2 emissions may indicate operational problems with the SRU.	

Unit/Group/Process Information	
ID No.: V-16	
Control Device ID No.: V-16INC	Control Device Type: Sulfur Recovery Unit with Incinerator
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 112, Sulfur Compounds	SOP Index No.: R112-01
Pollutant: SO2	Main Standard: § 112.7(a)
Monitoring Information	
Indicator: SO2 Mass Emissions in Pounds per Hour	
Minimum Frequency: four times per hour	
Averaging Period: one hour	
Deviation Limit: SO2 emissions may not exceed 580.11 lb/hr, based on the equation in 30 TAC 112.7. (Stack Effluent Flow Rate, q=5009 scfm)	
Basis of CAM: A common way to determine if a sulfur recovery unit (SRU) is operating correctly is to operate the thermal incinerator above a minimal combustion temperature based on performance tests, manufacturer's recommendations, engineering calculations and/or historical data. The monitoring of combustion temperature of a thermal incinerator used to oxidize sulfur compounds is required in 40 CFR Part 60, Subparts BB (Standards of Performance for Kraft Pulp Mills) and LLL (Standards of Performance for Onshore Natural Gas Processing: SO2 Emissions). Additionally, this option requires the monitoring of the SO2 mass emission rate since an increase in SO2 emissions may indicate operational problems with the SRU.	

Unit/Group/Process Information	
ID No.: V-5, V-16	
Control Device ID No.: V-5INC, V-16INC	Control Device Type: Sulfur Recovery Unit with Incinerator
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 112, Sulfur Compounds	SOP Index No.: R112-01
Pollutant: SO2	Main Standard: § 112.7(a)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: four times per hour	
Averaging Period: one hour	
Deviation Limit: The minimum combustion temperature is 1200 degrees F (649 C)	
Basis of CAM: A common way to determine if a sulfur recovery unit (SRU) is operating correctly is to operate the thermal incinerator above a minimal combustion temperature based on performance tests, manufacturer's recommendations, engineering calculations and/or historical data. The monitoring of combustion temperature of a thermal incinerator used to oxidize sulfur compounds is required in 40 CFR Part 60, Subparts BB (Standards of Performance for Kraft Pulp Mills) and LLL (Standards of Performance for Onshore Natural Gas Processing: SO2 Emissions). Additionally, this option requires the monitoring of the SO2 mass emission rate since an increase in SO2 emissions may indicate operational problems with the SRU.	

Unit/Group/Process Information	
ID No.: V-5, V-16	
Control Device ID No.: v-5INC, V-16INC	Control Device Type: Sulfur Recovery Unit with Incinerator
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart J	SOP Index No.: 60J-01
Pollutant: SO_2	Main Standard: § 60.104(a)(2)(i)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: four times per hour	
Averaging Period: one hour	
Deviation Limit: The minimum combustion temperature is 1200 degrees F (649 degrees C).	
Basis of CAM: A common way to determine if a sulfur recovery unit (SRU) is operating correctly is to operate the thermal incinerator above a minimal combustion temperature based on performance tests, manufacturer's recommendations, engineering calculations and/or historical data. The monitoring of combustion temperature of a thermal incinerator used to oxidize sulfur compounds is required in 40 CFR Part 60, Subparts BB (Standards of Performance for Kraft Pulp Mills) and LLL (Standards of Performance for Onshore Natural Gas Processing: SO2 Emissions). Additionally, this option requires the monitoring of the SO2 mass emission rate since an increase in SO2 emissions may indicate operational problems with the SRU.	

Unit/Group/Process Information	
ID No.: V-5, V-16	
Control Device ID No.: v-5INC, V-16INC	Control Device Type: Sulfur Recovery Unit with Incinerator
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart J	SOP Index No.: 60J-01
Pollutant: SO_2	Main Standard: § 60.104(a)(2)(i)
Monitoring Information	
Indicator: SO2 Mass Emissions in Pounds per Hour	
Minimum Frequency: four times per hour	
Averaging Period: one hour	
Deviation Limit: It is a deviation if emissions exceed 250 ppm by volume (dry basis) of sulfur dioxide (SO2) at zero percent excess air.	
Basis of CAM: A common way to determine if a sulfur recovery unit (SRU) is operating correctly is to operate the thermal incinerator above a minimal combustion temperature based on performance tests, manufacturer's recommendations, engineering calculations and/or historical data. The monitoring of combustion temperature of a thermal incinerator used to oxidize sulfur compounds is required in 40 CFR Part 60, Subparts BB (Standards of Performance for Kraft Pulp Mills) and LLL (Standards of Performance for Onshore Natural Gas Processing: SO2 Emissions). Additionally, this option requires the monitoring of the SO2 mass emission rate since an increase in SO2 emissions may indicate operational problems with the SRU.	

Unit/Group/Process Information	
ID No.: V-20	
Control Device ID No.: V-20INC	Control Device Type: Sulfur Recovery Unit with Incinerator
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-01
Pollutant: OPACITY	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Opacity	
Minimum Frequency: six times per minute	
Averaging Period: six-minute	
Deviation Limit: It is a deviation if opacity exceeds 20%	
Basis of CAM: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.	

Unit/Group/Process Information	
ID No.: V-20	
Control Device ID No.: V-20INC	Control Device Type: Sulfur Recovery Unit with Incinerator
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart J	SOP Index No.: 60J-01
Pollutant: PM	Main Standard: § 60.102(a)(1)
Monitoring Information	
Indicator: Opacity	
Minimum Frequency: six times per minute	
Averaging Period: six-minute	
Deviation Limit: It is a deviation if opacity exceeds 30%, except for one six minute average opacity reading in any one hour period.	
Basis of CAM: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.	

Compliance Review

1. In accordance with 30 TAC Chapter 60, the compliance history was reviewed on 01/14/14.
2. The compliance history review evaluated the period from 09/01/08 to 08/31/13.
   Site rating: 20.93 Company rating: 13.37
   (High < 0.10; Satisfactory > 0.10 and < 55; Unsatisfactory > 55)
3. Has the permit changed on the basis of the compliance history or site/company rating? .....No

Permit reviewer notes: NA

Available Unit Attribute Forms

OP-UA1 - Miscellaneous and Generic Unit Attributes
OP-UA2 - Stationary Reciprocating Internal Combustion Engine Attributes
OP-UA3 - Storage Tank/Vessel Attributes
OP-UA4 - Loading/Unloading Operations Attributes
OP-UA5 - Process Heater/Furnace Attributes
OP-UA6 - Boiler/Steam Generator/Steam Generating Unit Attributes
OP-UA7 - Flare Attributes
OP-UA8 - Coal Preparation Plant Attributes
OP-UA9 - Nonmetallic Mineral Process Plant Attributes
OP-UA10 - Gas Sweetening/Sulfur Recovery Unit Attributes
OP-UA11 - Stationary Turbine Attributes
OP-UA12 - Fugitive Emission Unit Attributes
OP-UA13 - Industrial Process Cooling Tower Attributes
OP-UA14 - Water Separator Attributes
OP-UA15 - Emission Point/Stationary Vent/Distillation Operation/Process Vent Attributes
OP-UA16 - Solvent Degreasing Machine Attributes
OP-UA17 - Distillation Unit Attributes
OP-UA18 - Surface Coating Operations Attributes
OP-UA19 - Wastewater Unit Attributes
OP-UA20 - Asphalt Operations Attributes
OP-UA21 - Grain Elevator Attributes
OP-UA22 - Printing Attributes
OP-UA24 - Wool Fiberglass Insulation Manufacturing Plant Attributes
OP-UA25 - Synthetic Fiber Production Attributes
OP-UA26 - Electroplating and Anodizing Unit Attributes
OP-UA27 - Nitric Acid Manufacturing Attributes
OP-UA28 - Polymer Manufacturing Attributes
OP-UA29 - Glass Manufacturing Unit Attributes
OP-UA30 - Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mill Attributes
OP-UA31 - Lead Smelting Attributes
OP-UA32 - Copper and Zinc Smelting/Brass and Bronze Production Attributes
OP-UA33 - Metallic Mineral Processing Plant Attributes
OP-UA34 - Pharmaceutical Manufacturing
OP-UA35 - Incinerator Attributes
OP-UA36 - Steel Plant Unit Attributes
OP-UA37 - Basic Oxygen Process Furnace Unit Attributes
OP-UA38 - Lead-Acid Battery Manufacturing Plant Attributes
OP-UA39 - Sterilization Source Attributes
OP-UA40 - Ferroalloy Production Facility Attributes
OP-UA41 - Dry Cleaning Facility Attributes

OP-UA42 - Phosphate Fertilizer Manufacturing Attributes
OP-UA43 - Sulfuric Acid Production Attributes
OP-UA44 - Municipal Solid Waste Landfill/Waste Disposal Site Attributes
OP-UA45 - Surface Impoundment Attributes
OP-UA46 - Epoxy Resins and Non-Nylon Polyamides Production Attributes
OP-UA47 - Ship Building and Ship Repair Unit Attributes
OP-UA48 - Air Oxidation Unit Process Attributes
OP-UA49 - Vacuum-Producing System Attributes
OP-UA50 - Fluid Catalytic Cracking Unit Catalyst Regenerator/Fuel Gas Combustion Device/Claus Sulfur Recovery Plant Attributes
OP-UA51 - Dryer/Kiln/Oven Attributes
OP-UA52 - Closed Vent Systems and Control Devices
OP-UA53 - Beryllium Processing Attributes
OP-UA54 - Mercury Chlor-Alkali Cell Attributes
OP-UA55 - Transfer System Attributes
OP-UA56 - Vinyl Chloride Process Attributes
OP-UA57 - Cleaning/Depainting Operation Attributes
OP-UA58 - Treatment Process Attributes
OP-UA59 - Coke By-Product Recovery Plant Attributes
OP-UA60 - Chemical Manufacturing Process Unit Attributes
OP-UA61 - Pulp, Paper, or Paperboard Producing Process Attributes
OP-UA62 - Glycol Dehydration Unit Attributes
OP-UA63 - Vegetable Oil Production Attributes